

Secondary School EFL Teachers' Perception of ICT Use in Learning and Teaching: A Case Study in Greater Jakarta

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Abstract

Since ICT tools influx into EFL classrooms provides an increasing range of possible solutions for refining teaching and learning inputs, processes, and outcomes, their use can benefit students and teachers. However, ICT implementation in the learning process is affected by various factors, among which teachers' perception is the most significant. This study aimed at investigating teachers' perceptions of ICT use in EFL learning activities. To attain the aim, data as collected by asking 32 EFL teachers from various junior and senior high schools in Greater Jakarta to fill in a questionnaire consisting of 60 closed-ended questions. To triangulate and elaborate the quantitative data, 5 open-ended questions were asked to 8 of the participants selected as the interviewees. The results indicate that the teachers had a good level of perception of ICT use in EFL learning and teaching activities. The majority of them had integrated ICT in their EFL classrooms. Regarding the issues related to facilities and technical expertise they sometimes encountered, they either asked for help from technicians or colleagues. Many of them also agreed with the importance of attending training to enhance their skills in using ICT in learning and teaching.

Keywords: EFL, ICT, Teachers' perception

INTRODUCTION

Information and Communication Technology (ICT) development throughout the past three decades has affected the way we work, learn, and communicate. It has also revolutionized English as a Foreign Language (EFL) learning and teaching field. ICT tools inflow into language learning and teaching has delivered an increasing range of possible solutions for refining teaching and learning inputs, processes, and outcomes (Pardede, 2012). Besides enabling teachers to easily access the authentic learning environment required to create more motivating, pleasant, appealing, and engaging classes to students (Elliot, 2009), ICT also provides a variety of tools for educators trying to extend learning beyond the classroom (Haygood, Garner, & Johnson, 2012). ICT use does not only positively affects the learning environment (Mikre, 2011) but also increases learning process quality (Davies, in Kandasami & Shah (2013) and has significantly contributed to teaching practices, school innovations, and community services (Mikre, 2011). Moreover, Ahmad (2012) reported that ICT integration to the class can boost

students' participation, promote student-centered mode, endorse create a positive atmosphere, and improve the students' writing performance.

The use of ICT in EFL is not new. Pardede's (2011) stated that the trend of ICT use in EFL can be traced to the 1930s when instructors used audiovisual tools to deliver content in the classroom, which was followed by the use of audio recordings, television, films, video, and computers in the trials to bring the target language and culture to students in the 1960s. Then, language teaching pedagogy shift during the 1980s to 2000s to communicative language teaching which emphasized on sociocultural variables, cooperative group learning, and student engagement in authentic, meaningful, and interactive contextualized discourse required more sophisticated educational technologies, and the internet and its related applications emerged to meet this need. Since that time, ICT implementation in language teaching and learning process has been increasingly growing (Suherdi, 2012 & Romero, 2008). This is confirmed by Kandasami & Shah (2013) by stating that research findings over the past two decades reveal the positive effect of ICT in students learning.

In the context of EFL teaching in Indonesian schools, ICT use has been stated as an essential aspect. The 2013 curriculum defines that ICT is an essential component to be integrated into each subject including English, particularly in secondary education. However, ICT implementation in EFL classrooms in Indonesian schools is still low (Suherdi, 2012; Wiranto, 2014). SEAMOLEC (2011) reported that Indonesian schools had begun to use ICT infrastructure, but the resources in schools are low. This is supported by Cahyono and Mutiaraningrum (2016) who suggested that ICT use ICT in teaching is not evident in many places in Indonesia. Besides, Harendita (2013) reported that while 80% of Indonesian schools had access to the Internet in 2011, only 39% of teachers used ICT during the teaching and learning process.

The present author's discussion with some English teachers in some forums indicated that ICT tools were not yet optimally used in their EFL classrooms. Despite its possibility to provide massive resources to support their teaching practices, many teachers were unwilling to use ICT. Some of them still favor using traditional media and resources, like white-boards and textbooks despite their familiarity with the Internet. Some of them had involved their students to employ some ICT tools in the learning process, such as communicating with each other, via e-mails Instagram, and WhatsApp, but or it is not widespread.

The literature suggests that some factors affect teachers' willingness or unwillingness to use technology in the learning process, including ICT tools availability, support from the school administrators, and the variables related to teachers. Various studies (Hew & Brush, 2007; Li, 2007) have shown that among those factors, the variables related to teachers are the most essential that determine teachers' use of ICT in their teaching. Marcinkiewitz (1993) accentuated that ICT integration to learning cannot be achieved if the teacher and ICT are not reconciled. Regarding this, various studies reported that teachers' perceptions and attitudes towards ICT can be said to be the leading factors (Selwyn, 1999; Afshari et al, 2009; Qasem & Viswanathapa, 2016). Thus, it highly necessary to understand teachers' perceptions of the current employment of ICT in their EFL classrooms.

Numerous studies concerning perceptions of ICT use in EFL classrooms in Indonesian contexts have been conducted. However, they focus on pre-service EFL teachers (Pardede, 2015; Inayati & Emaliana, 2017; Purnamasari, 2019; Pardede, 2019; Nariyati, Sudirman, & Pratiwi, 2020). on teachers' perception of the use of specific ICT

tools, such as interactive games (Asnadi, Ramniningsih & Myartawan, 2018), computer (Yunandami & Gunawan, 2012), and social media (Agustrianita, 2017). There is a need to investigate EFL teachers' perceptions of the use of ICT tools as a whole. This study, accordingly, was conducted to answer the following research question: What are the perceptions of EFL teachers in Greater Jakarta of the use of ICT in learning and teaching?

LITERATURE REVIEW

What is ICT?

The term ICT generally refers to electronic equipment used to create, process, store, display, transmit, and exchange information. In this context, ICT includes electronic technology and digital devices, such as television, video, radio, DVD, telephone (whether landline or cellular), satellite systems, computer and network hardware and software, and all equipment and services related to these technologies, such as email and blogs and video conferencing (UNESCO, 2007). In line with this definition, Hennessy et al. (2005) stated that ICT includes a variety of technical media which includes hardware (projection technology, laptops, desktop computers, netbooks, tablets, cell phones, data storage, and digital audio and visual equipment), software applications, and information systems (Intranet, Internet, cloud computing). Thus, ICT includes web-based (internet network) and non-web technology tools. Meleisea (2007) asserts that ICT is a technology used to create, display, store, manipulate, and exchange information.

In learning and teaching context, ICT is defined in a more limited scope and includes only computer-based technology (including laptops, tablets, smartphones), software, and Internet-based technology covering websites, blogs, e-mails, and social media sites such as YouTube, which is used to facilitate learning and teaching. According to Collis and Moonen (2001), the use of ICTs in education includes (1) learning resources (i.e., educational software, learning resources distributed via the Internet, and instructional videos); (2) learning management systems (i.e., software and technology tools that support face-to-face instruction, such as Edmodo, Blackboard, and Moodle, and computer-based evaluation systems; and (3) communications (for examples, email systems, and social media).

Advantages of Using ICT in EFL Learning and Teaching

Many studies have currently examined how ICT if properly implemented, can benefit students and teachers Cowie and Jones (2009) indicated that ICT can foster educational objectives, including knowledge selection and creation, collaboration, and reflection. Uluoyol and Şahin (2014, p. 67) reported that ICT use can make "lessons more interesting, more enjoyable for both teachers and students, more diverse, more motivating and more supportive of productive learning." According to Yang and Chang (2012, p. 128), "technology has created opportunities for learning to become a more interactive process between instructors and learners, as well as among learners." Al-Munawwarah (2014) reported that ICT use helps teachers to create interesting and enjoyable learning activities, promoting learner autonomy, and to promote students' learning motivation.

Furthermore, Houcine (2011) pointed out five ICT use apparent impacts to support EFL learning and teaching: (1) to help educators easily adapt teaching materials to meet the circumstances, learner's needs, and responses; (2) to provide access to authentic materials on the web; (3) to facilitate us to react upon and enables the use of recent/daily news; (4) to help teacher combine or use alternately skills (listening and speaking, reading and writing, speaking and writing) and media (text and images, text and audio, text, and

video clip) so that classes become more interesting and learners' engagement boosts; and (5) to enable teachers and/or students to focus on one specific aspect of the lesson (grammar, pronunciation, vocabulary, etc.). In line with that, Padurean and Margan (2009) listed four benefits of ICT use in the EFL classroom: (1) ICT provides the capacity to control the presentation. Unlike books which have a fixed presentation, computers can combine visual with listening materials, text with graphics and pictures; (2) ICT offers novelty and creativity. ICT facilitates teachers to use different materials for each lesson; (3) ICT provides fast feedback to students' answers through error correction. Computers not only spot the mistake but also correct it and give the appropriate advice; (4) ICT offers adaptability. Teachers can adapt computer programs to suit their students' needs and levels of language knowledge. This makes computer programs more learner-friendly, different from books which are produced in a single uniform format and need to be taught irrespectively of students' problems.

Teachers' Perception of ICT Integration in EFL Learning

ICT integration in the Indonesian EFL classroom context is not a new paradigm. The 2004 Curriculum, well-known as Competence-Based Curriculum includes ICT as an essential part. In the 2013 Curriculum, all subjects, including English, are indirectly insisted to use technology-based learning tools to conform with the changing learning philosophy from instructivism to constructivism (Hidayati, 2016). However, the majority of teachers are still reluctant to integrate ICT into their classrooms. According to Harendita (2013), although 80% of Indonesian schools had got access to the Internet in 2011, only 39% of teachers used ICT during the teaching and learning process.

Teachers' reluctance to integrate ICT with learning is caused by some factors, including ICT tools availability, ICT pedagogy, support from the school administrators, and the variables related to teachers. The studies of Hew and Brush (2007) and Li (2007) show that the variables related to teachers are the most essential that determine teachers' use of ICT in their teaching. This is in line with Atkins and Vasu (as cited in Park & Son, 2009) who accentuated that teachers' perceptions have a crucial influence on the use of ICT in English teaching. Cope and Ward (2002) reported that teachers' perceptions of technology include 'how' and 'what' effects technology can bring to students. Thus, teachers' perceptions of technology cover their ability to identify the potential of technology to motivate students

Various studies have revealed that teachers' positive perceptions tend to motivate their use of technology in learning. Galanouli, Murphy, and Gardner's (2004) study reveals that teachers with positive perceptions view training in ICT worthwhile and are prone to use it in their teaching. Teachers with positive perceptions are also more open toward the possible innovation technology can bring about in learning, such as its impact on higher-order thinking skills and language learning content acquisition (Baylor & Ritchie, 2002). Additionally, Angers and Machtmes (2005) reported that the successful technology integration in education is highly determined by the teachers' personal beliefs and concerns, and those beliefs and concerns pursue their probability to employ ICT (Russell et al., 2003). Angers and Machtmes (1999) affirmed that teachers who perceive ICT tools can be used to augment lessons, motivate, and bring changes to their teaching strategies that tend to confidently adopt the technology.

On the other hand, teachers' negative perceptions emerge barriers that limit their use of ICT. Such teachers tend to justify their reluctance to employ technology by using some reasons, including their lack of knowledge, facilities, time, support, materials, and

training (Pelgrum, 2001; Leaks, 2001; Samuel & Bakar, 2003;). Angers and Machtmes (1999) asserted that teachers' negative perceptions of technology use tend to block technology integration into learning and teaching.

METHODS

Research Design

To explore EFL teachers' perception of ICT use in learning and teaching, this study employed sequential explanatory design (Creswell, 2012) which collected data in two phases. The quantitative data were collected using a questionnaire in the first phase. After the data were analyzed, the qualitative data necessitated to elaborate and clarify the quantitative data were collected in the second phase through interviews.

Population and Sample

The population of this study was all junior and senior high school English teachers in Jakarta, Depok, Tangerang, and Bekasi (Greater Jakarta). The sample was taken using the snowball sampling technique. The participants were recruited by first finding a teacher in each suburban (Depok, Tangerang, and Bekasi) and three teachers in Jakarta. After these six teachers filled in the questionnaire, they were asked to recruit other teachers to participate. After two weeks, 32 participants returned the questionnaire. Since these 32 questionnaires were filled completely, all of them were taken as the source of data. Based on the analysis of the quantitative data, five questions intended to collect qualitative data for clarification and elaboration were formulated. Eight participants were selected purposively from the 32 teachers as the interviewees. The criteria employed to select them were: (1) the level of the schools they were teaching in; (2) types of their school (state or private); and (5) how long they have been teaching. Based on these criteria, the interviewees include: (1) four teachers of junior high school teachers and four teachers of senior high schools; (2) four were teaching in state schools and the other four were teaching in private schools, and (3) four had been teaching less than five years, two had been teaching between five to ten years, and the other two have been teaching for more than ten years. The quantitative data were collected in September 2019, while the qualitative data were collected from November to December 2019.

Instruments

The questionnaire employed to collect the quantitative data consisted of 60 open-ended questions. It was adapted from the questionnaire developed by Mahdum, Hadriana, and Safriyanti (2019). The reliability of the questionnaire was tested using Cronbach's Alpha test with a coefficient of (r) 0.836 for the first part (Statements 1-39) and 0.762 for the second part (Statements 40-60). Because the reliability coefficient is above 0.700, this questionnaire is reliable. Some modifications were made to address the research question. The questionnaire consists of seven indicators or dimensions: (1) perceptions of ICT usefulness in learning, (2) perceptions of ICT usefulness in teaching, (3) perceptions of educational values of ICT; (4) ICT impacts on learning and teaching; (5) teachers' self-efficacy in using ICT; (6) importance of ICT Training for teachers; and (7) teachers' level of confidence in employing ICT. To gauge the data, the participants were asked to indicate their agreement or disagreement with each statement on a 4-point Likert scale that ranged from strongly disagree, score 1, to strongly agree, score 4.

Data Analysis Technique

The obtained quantitative data were analyzed by administering the descriptive statistical operation in terms of percentages and means. The qualitative data obtained from the interview were used to triangulate and elaborate the quantitative data.

FINDINGS

In this section, the findings are presented based on the seven criteria or dimensions of the EFL teachers' perception of ICT use in learning and teaching, i.e., (1) perceptions of ICT usefulness in learning, (2) perceptions of ICT usefulness in teaching, (3) perceptions of educational values of ICT; (4) ICT impacts on learning and teaching; (5) teachers' self-efficacy in using ICT; (6) importance of ICT Training for teachers; and (7) teachers' level of confidence in employing ICT.

EFL Teachers' Perceptions of ICT Usefulness in Learning

Table 1. ICT Usefulness in Learning

No	Statements	SD	D	A	SA	M
		f (%)	f (%)	f (%)	f (%)	
1	ICT makes the learning process more effective	0 (0)	6 (18,8)	12 (37,5)	14 (43,8)	3,25
2	ICTs make learning activities more interesting and enjoyable	0 (0)	7 (21,9)	11 (34,4)	14 (43,8)	3,22
3	ICT can make learning activities more varied	0 (0)	2 (6,3)	17 (53,1)	13 (40,6)	3,34
4	ICT increases student motivation	0 (0)	0 (0)	12 (37,5)	20 (62,5)	3,63
5	ICT increases students' positive attitudes towards learning	0 (0)	5 (15,6)	12 (37,5)	15 (46,9)	3,31
6	ICT makes students more active and involved in learning	0 (0)	0 (0)	16 (50)	16 (50)	3,5
7	ICT makes students aware of how technology affects their lives	0 (0)	0 (0)	10 (31,3)	22 (68,8)	3,69
8	For students, the role of ICT is as important as textbooks.	0 (0)	8 (25)	16 (50)	8 (25)	3
9	ICTs facilitate students to communicate with teachers and their classmates	0 (0)	0 (0)	10 (31,3)	22 (31,3)	3,69
10	Integration of ICT makes learning activities done more easily	0 (0)	2 (6,3)	8 (25)	22 (68,8)	3,63
11	Use of ICT encourages students to learn more actively	0 (0)	4 (12,5)	8 (25)	20 (62,5)	3,5

In terms of ICT usefulness in students' learning, Table 1 shows that the participants perceived ICT employment very useful. In other words, they have a positive perception of ICT use to facilitate students in learning. A majority of them agreed that the use of ICT can make the learning process more effective and varied, promote students' motivation and involvement, nurture students' positive attitudes towards learning, and can make students aware of how technology affects their lives. They also perceived ICT can make learning activities more interesting, enjoyable, and even done more easily.

EFL Teachers’ Perceptions of ICT usefulness in Teaching

Table 2 displays, in terms of ICT usefulness, to support EFL teaching, the participants perceived ICT use very useful. A majority of them agreed that ICT use helps teachers to conduct almost all teaching activities, including to provide learning resources, to explain new concepts, to monitor students’ learning activities and progress. Interestingly, almost all participants agreed that ICT facilitates teachers to learn new skills and improves their performance in teaching, and all of them agreed that ICT helps teachers organize and keep teacher’s and students’ documents.

Table 2. ICT Usefulness in Teaching

No	Statements	SD	D	A	SA	M
		f (%)	f (%)	f (%)	f (%)	
1	ICTs facilitates me to learn new skills	0 (0)	2 (.6.3)	8 (25)	22 (31.3)	3,63
2	ICT helps teachers provide learning resources	0 (0)	2 (6.3)	17 (53.1)	13 (40.6)	3,34
3	ICT makes helps teachers to explain new concepts	0 (0)	0 (0)	16 (50)	16 (50)	3,5
4	ICT helps teachers monitor students' learning progress	0 (0)	0 (0)	16 (50)	16 (50)	3,5
5	ICT helps teachers monitor student learning activities	0 (0)	0 (0)	16 (50)	16 (50)	3,5
6	ICT helps teachers evaluate students' learning progress	0 (0)	0 (0)	16 (50)	16 (50)	3,5
7	ICT helps teachers organize and keep teacher and student's documents	0 (0)	0 (0)	10 (31.3)	22 (31.3)	3,69
8	ICT improves my performance in teaching	0 (0)	4 (12.5)	8 (25)	20 (62.5)	3,5

EFL Teachers’ Perceptions of ICT Educational Values

As shown in Table 4, the participants perceived that ICT use is valuable in education. All of them agreed and strongly agreed that the use of ICT can facilitate SCL and improve students’ understanding. All of them also agreed and strongly agreed that the use of ICT can prepare students for their future careers, obtain the latest information, and learn new skills.

Table 3. ICT Educational Values

No	Statements	SD	D	A	SA	M
		f (%)	f (%)	f (%)	f (%)	
1	Use of ICT supports student-centered learning (SCL)	0 (0)	0 (0)	8 (25)	24	3,75
2	Use of ICT can help improve students' understanding	0 (0)	0 (0)	10 (31.3)	22 (31.3)	3,69
3	Use of ICT can help students prepare for their careers in the future	0 (0)	0 (0)	8 (25)	24 (75)	3,75
4	Use of ICTs helps to obtain the latest information	0 (0)	0 (0)	10 (31.3)	22 (31.3)	3,69
5	The use of ICT supports teachers and students in learning new skills.	0 (0)	0 (0)	16 (50)	16 (50)	3,5

EFL Teachers' Perceptions of ICT impacts on Learning and Teaching

Table 4 displays that the majority of the participants had a good perception of ICT use impacts on learning and teaching. The majority of them agreed and strongly agreed that the use of ICTs helps to inspire students to express themselves and improve their learning quality. Furthermore, almost all of them agreed and strongly agreed that ICT use helps teachers to develop their pedagogical competence and increase their self-confidence. Interestingly, the participants indicated a more positive perception of the impacts of ICT use on teaching than on learning. The mean scores of their responses towards the impacts of ICT use on teaching are higher than of learning.

Table 4. Impacts on Learning and Teaching

No	Statements	SD	D	A	SA	M
		f (%)	f (%)	f (%)	f (%)	
1	Use of ICT helps to inspire students to express opinions	3 (9.4)	3 (9.4)	8 (25)	18 (56.3)	3,28
2	Use of ICT helps to improve the quality of my students' learning	3 (9.4)	3 (9.4)	8 (25)	18 (56.3)	3,28
3	Use of ICT helps to make learning more meaningful	0 (0)	4 (12.5)	16 (50)	12 (37.5)	3,25
4	The use of ICT helps to increase teacher confidence.	0 (0)	0 (0)	10 (31.3)	22 (68.8)	3,69
5	Use of ICT helps to improve teachers' pedagogical competence	0 (0)	3 (9.4)	10 (31.3)	19 (59.4)	3,5
6	Use of ICT helps to improve the quality of my teaching	0 (0)	0 (0)	10 (31.3)	22 (31.3)	3,69
7	ICT use helps to make my class more successful	0 (0)	4 (12.5)	8 (25)	20 (62.5)	3,5

EFL Teachers' Self-efficacy in Using ICT

As shown in Table 5, the participants perceived they have the proper ability and knowledge to use ICT in learning activities. The majority of them agreed and strongly agreed that ICT use in teaching does not emerge technical problems. They were able to search, evaluate, and choose appropriate ICT tools to support their teaching activities. Almost all of them claimed they have sure strategies to solve obstacles in the use of ICT so that many of them were confident to keep on integrating ICT in their class' learning activities.

Table 5. Self-Efficacy

No	Statements	SD	D	A	SA	M
		f (%)	f (%)	f (%)	f (%)	
1	The use of ICTs does not emerge technical problems	0 (0)	8 (25)	16 (50)	8 (25)	3
2	I am confident in my ability to use ICT in learning	0 (0)	6 (18.8)	12 (37.5)	14 (43.8)	3,25
3	I can explore, evaluate, and choose the right ICT tools to support learning activities in my class.	0 (0)	4 (12.5)	12 (37.5)	16 (50)	3,38
4	I know some strategies for overcoming problems that might arise in the use of ICTs	0 (0)	4 (12.5)	10 (31.3)	18 (56.3)	3,44
5	I am confident that I can continue to integrate ICT into my class learning activities in the future	4 (12.5)	5 (15.6)	9 (28.1)	14 (43.8)	3,03

EFL Teachers' Perception of the Importance ICT Training

Table 6 demonstrates that two-third of the participants had ever attended ICT training that motivated them to employ ICT in teaching, but the majority (81.3%) thought they needed more training for integrating ICT in teaching. All of them agreed and strongly agreed that English teachers and teacher-candidates must attend training for using ICT in learning.

Table 6. Importance of ICT Training

No	Statements	SD	D	A	SA	M
		f (%)	f (%)	f (%)	f (%)	
1	I have ever attended ICT training that motivates me to use ICT in teaching	4 (12.5)	4 (12.5)	14 (43.8)	10 (31.3)	2,94
2	I need the training to integrate ICT into teaching	3 (9.4)	3 (9.4)	8 (25)	18 (56.3)	3,28
3	All teachers and prospective teachers must attend training for using ICT in learning	0 (0)	0 (0)	8 (25)	24 (75)	3,75

EFL Teachers' Level of Confidence in ICT Skills.

Table 7 exhibits that the participants' level of confidence in ICT skills mastery varies from one skill to others. All of them were sure and very sure they can run the basic PC operation, manage files and folders, run MS Word Program, create a basic presentation, and search the internet for information. The majority of them were sure and very sure they can access data from hard disc or CD, use a digital camera, download and save files from the internet, upload files to the intended site on the Internet, and receive and reply emails. Their level of confidence was a bit lower in operating a spreadsheet program, converting files from one form to another, Using "chat" rooms or forums on social media. Their level of confidence was lowest in designing a web page, using various design programs, editing pictures, animations, or videos, managing assignments in LMS, creating tests in LMS, and publishing personal blogs.

Table 7. Level of Confidence in ICT Skills

No	Statements	VU	U	S	VS	Mean
		f (%)	f (%)	f (%)	f (%)	
1	To run basic PC / Laptop Operations (boot, use keyboard, mouse, sleep, shut down, restart).	0 (0)	0 (0)	8 (25)	24 (75)	3,75
2	To manage files and folders (safe, delete, move to, etc.)	0 (0)	0 (0)	8 (25)	24 (75)	3,75
3	To operate a word processor (MS Word Program)	0 (0)	0 (0)	10 (31.3)	22 (68.8)	3,69
4	To operate a spreadsheet program (Microsoft Excel)	6 (17.6)	8 (25)	8 (25)	12 (35.3)	2,76
5	To create a basic presentation (PowerPoint)	0 (0)	0 (0)	8 (25)	24 (75)	3,75
6	To merge files of various types (text, images, sound, video) to create multimedia presentations	8 (25)	10 (35.3)	8 (25)	6 (17.6)	2,38
7	To access data from hard disc or CD / DVD	0 (0)	5 (15.6)	9 (28.1)	18 (68.8)	3,41
8	To use a digital camera	0 (0)	6 (17.6)	16 (23.5)	10 (35.3)	3,13

Table 7. Level of Confidence (cont.)

No	Statements	VU	U	S	VS	Mean
		f (%)	f (%)	f (%)	f (%)	
9	To convert files from one form to another (Word to pdf, etc.)	4 (12.5)	6 (17.6)	8 (25)	14 (43.8)	3
10	Editing pictures, animations or videos	11	10 (35.3)	6 (17.6)	55 (15.6)	2,16
11	Using various design programs (photoshop, flash, Corel Draw, Inkscape, etc.)	10 (35.3)	10 (35.3)	8 (25)	4 (12.5)	2,19
12	Searching the internet for information	0 (0)	0 (0)	10 (35.3)	22 (68.8)	3,69
13	Downloading and saving files from the internet	0 (0)	4 (12.5)	8 (25)	20 (62.5)	3,5
14	Uploading files to the intended site on the Internet	4 (12.5)	0 (0)	8 (25)	24 (75)	3,38
15	To receive, read, write and send e-mails	0 (0)	2 (6.25)	6 (17.6)	24 (75)	3,69
16	Using "chat" rooms or forums on social media	5 (15.6)	7 (21.9)	12 (37.5)	8 (25)	2,72
17	Publishing personal blogs (Blogger, WordPress, etc.).	7 (21.9)	8 (25)	8 (25)	9 (28.1)	2,59
18	Designing a Web Page "or" personal site "	12 (35.3)	11 (34.4)	6 (17.6)	3 (9.4)	2
19	Facilitating discussions on LMS e.g., Google Classroom, Moodle, Edmodo)	10 (35.3)	9 (28.1)	8 (25)	5 (15.6)	2,25
20	Creating tests/quizzes on LMS	10 (35.3)	10 (35.3)	8 (25)	4 (12.5)	2,19
21	Managing assignment on LMS	10 (35.3)	9 (28.1)	8 (25)	5 (15.6)	2,25
Total		97	115	179	283	62.2
Mean						3.0

DISCUSSION

The results show that the teachers had a good level of attitudes towards ICT use in EFL learning activities. The mean score of the responses to the whole dimensions of their perception of ICT use (see Table 8) is 3.5 (of 4). This indicates EFL teachers' in Greater Jakarta generally have high positive perceptions of ICT integration in learning and teaching. Having such perception motivated them to integrate ICT tools in their EFL classrooms, as all of the eight interviewees responded "Yes" when they were asked, "Have you used ICT in your English class?"

However, their levels of perception vary in one dimension from another. As shown in Table 8, their highest level of perception goes to the educational values (mean score: 3.68). This might be affected by their awareness that ICT use can facilitate SCL so that it increases students' learning achievement and that ICT can prepare students for their future careers, obtain the latest information, and learn new skills.

The second-highest level of perception goes to their perception of ICT usefulness in teaching (3.57). This might be related to the positive experiences they got in the use of ICT i. The information obtained through the interviews reveal that the participants used ICT "To conduct presentation of the class homework projects", "... for presenting teaching materials", "... for explaining the lessons which are easier to do rather than

using a whiteboard”, and “... for delivering online quizzes, homework, and tests more effectively and efficiently than doing them manually”.

Table 8. Holistic Responses

No	Statements	SD	D	A	SA	Mean
		f	f	f	f	
1	ICT Usefulness in Learning	0	38	130	184	3,41
2	ICT Usefulness in Teaching	0	2	92	130	3,57
3	Educational Values	0	0	52	108	3,68
4	Impacts	6	18	76	124	3,42
5	Self-Efficacy	4	27	59	70	3,22
6	Importance of Training	7	7	30	52	3,32
Total		17	92	439	668	20.6
Percentage		0.41	4.39	31.43	63.77	
Holistic Mean						3.45

The third-highest level of perception goes to their perception of the impacts of ICT use in learning and teaching (3.42), including the potential of using ICT to inspire students to express themselves and improve their learning quality, and to help teachers to develop their pedagogical competence and increase their self-confidence. The information obtained through the interviews clarifies this. The interviewees said the use of ICT "makes their time management and learning process more effective", "makes my students feel more confident to share their ideas through the discussion board", "helps my students pay attention to the subject", "makes teaching more creative", "enables me to save time to check students' works so that I can have more time for dealing with other activities."

The lowest level of perception goes to their perception of their self-efficacy in using ICT (mean score: 3.32). Although the majority of the participants perceived they have the proper ability and knowledge to use ICT in learning activities and most of them believed they can search, evaluate, and choose appropriate ICT tools to support their teaching activities, it is obvious that they were not yet fully satisfied with their ICT skills. This is supported by the findings that their level of confidence in ICT skills mastery varies from one skill to others (Table 7). Although all of them were confident in running the basic PC operation, manage files and folders, run MS Word Program, create a basic presentation, and search the internet for information, many of them were unconfident in conducting some complex skills, such as using various design programs and designing webpages.

Their having such various perceptions of self-efficacy makes their perception of the importance of ICT skills training quite disparate so that this dimension also gets the lowest level (mean score: 3.32). In the interviews, five of the interviewees said they need the training to use ICT in your English class, whereas the other three said they do not need it. The training the participants needed covers "the skills to manage time more effectively in using ICT for learning", "the skills to employ learning management system effectively", "the skills for making a website", "the skills for creating and editing videos", and "the skills to create and manage online assignments".

The interviews also reveal that although the participants could ask for help from technicians or colleagues when they encountered obstacles in ICT implementation, they believed it will be much better if they can handle the obstacles. Three of the interviewees also said that “ICT develops so quickly that they should keep on updating their ICT skills”. That’s why many of the interviewees believed they need training for developing their ICT skills.

CONCLUSIONS

The results of this show that EFL teachers in Greater Jakarta have high positive perceptions of ICT use in EFL learning and teaching. This perception is correlated with the findings that the majority of them had integrated ICT in their teaching. Their levels of perception quite vary in the six dimensions studied. The highest level of perception goes to the educational values ICT use can offer. The next highest levels respectively go to ICT usefulness in teaching, ICT impacts, ICT's usefulness in learning, teachers' self-efficacy in using ICT, and the importance of getting ICT skills training.

This study involved only 32 EFL teachers selected by using the snowball sampling technique. To get more rigorous findings, further researches are recommended to involve more participants employing a random sampling technique. By doing so, the results will be more comprehensive and can be generalized to the whole EFL teachers in Greater Jakarta.

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