

EFL TEACHERS' CAPABILITY AND BARRIERS IN USING INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

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Abstract: Integrating and developing ICT for the school has become an important facet and conferred a more robust pattern to get the new teaching and learning models. The combination of ICT has several benefits to form a context for teaching and learning English skills. In this pandemic situation, teachers should use kind of ICT tools for online teaching. Supported this necessity, there must be problems faced by the teacher in the access of ICT. Studying the teachers' capability and barriers in education will help teachers become successful technology adopters in the future. This study applied a qualitative descriptive research design conducted through questionnaires, observation, and interviews. The result of the questionnaire, interview, and observation was described. Participants were EFL teachers from senior-high-schools in Sanga desa. The study findings Teachers category good in capability and the main barriers faced by teachers were lack of facilities, time, training, and internet problem. The research has the purpose of exploring teachers' capability and the barriers they face to improve the quality of ICT use in teaching English in the future.

Keyword: ICT; teachers' capability; barriers.

INTRODUCTION

Integration of Communication and Technology (ICT) in English foreign language (EFL) is important for education in the future. Utilizing ICT in the process of teaching and learning activities, either in or outside the school. It helps developing teaching strategies, and rising teaching quality. One essential instrument for addressing the digital immigrant divide inside the state is knowledge data and communication technology (ICT) in education. According to Prensky (2001), digital immigrants mean people who weren't born within the digital world before 1990. The utilization of ICT in education will cut the digital divide and build new learning strategies. Gilakjani (2017) states that ICT is in addition viewed as media to push a brand new

learning method. It means ICT as a key in facilitating acceptable activities for students and also as an impact to contemplate fun and purposeful teaching ways.

According to Roy (2015, p.75), "ICT is all devices and tools in digital form, which can be distributed for realizing the goals of teaching-learning." ICT will support the teaching and learning process. Similarly, Zahra, et al. (2019) found that the use of ICT was highlighted at the school. Meanwhile, Cakici (2016) states that information and communication technologies (ICT) have increased dramatically reinforced and have a powerful learning atmosphere. As we know English in Indonesia is a foreign language, using ICT teaching and learning will be more exciting and

make the learning atmosphere more enthusiastic. Then, it takes a more creative way of learning (Fajri, et al., 2015; Inderawati, 2017; Apriani, et al., 2021)

Suherdi (2012) in his study found the utilization of ICT focus at schools particularly rare notably in English language teaching. Supported curriculum 2013 program, ICT could be a primary tool that ought to be integrated into every subject. Also in teaching English, particularly for High school. Teachers need to determine the exact tools of ICT to support teaching to be more effective. The utilization of technology is crucial, most lecturers would acknowledge, there is still rather a lot of to do an effective and pleasant use of the (latest) technology” (Rank et al., 2011, p.1). In the 21st century today, most tools are operations using English. There are examples of ICT devices used in the educational field as interactive whiteboards, interactive tables, tablets, digital books, laptops, multimedia, virtual teaching platform, and online applications (“life persona,” 2020). Based on Curriculum 2013, ICT integration as the in English language teaching and learning as concept to promotes students' learning autonomy and communicative development.

The use of ICT has barriers within the educational systems, like the way to increase the students' involvement to achieve higher academic accomplishment in Smeda, et al. (2014). If teachers have the potential to use kind of ICT tools in daily learning activities, the implementation of ICT is going to be successful for teaching and learning (Inderawati, et al., 2019a; Inderawati, et al., 2019b; . Capability in ICT includes knowledge, skill and attitude should develop to support the teachers be professional in teaching EFL. Such as the two blades, ICT will be very helpful on the other hand the barriers that always exist from various factors. Next, Elemam (2016) states if the teachers have numerous barriers to deploying ICT. Supporting Elemam's opinion (2016), Payal and Kanvaria (2018) claim there are barriers to implementing ICT tools in teaching and learning. The lack of computers, content, and material for teachers, teachers' skills, technical support, pedagogical support for lecturers, and school time organization. Examine the benefits of victimization ICT itself, it's needed to research the sort of ICT barriers faced by EFL teachers out of urban areas.

The research focusing on the topic of ICT is not something new there studies of ICT focus on

different objectives. Mollaei and Riasati (2013) conducted a study in Shiraz, Iran. They focus on teachers' perceptions of ICT in the class kind of technology, facilitating, implementation, and attitudes of male and female teachers toward using ICT. Other research, Juliana and Muslem (2017) conducted a study in Banda Aceh. The topic was the use of ICT: Perceptions and Challenges. The study found that academics faced three important challenges in explore of ICT. (1) restricted ICT tools and (2) low-level connections (3) The last challenge could be a lack of information and skill development. This study focuses on the teachers' capability: knowledge, skill, and attitude on barriers faced by EFL teachers.

This analysis supported the standard of education as a result of the event of technology modification continued and renewable. Significantly during this current pandemic, the teaching and learning method ought to be online. In this case, all the teachers should have the ability the use ICT. All the teachers must access ICT tools and provide learning based on curriculum, learning materials, time, and appropriate strategies. Learning material should be understood even online (Inderawati, 2011; Inderawati, et al., 2018). From the researchers' point of view, there is a shock wave for the use of ICT. Teachers will face barriers. Teachers may found teaching problems and support by lack of knowledge, skill and attitude, but they could solve the problem as easy by access in the city. Now the question is how to use kind of ICT tools for online teaching in the regions. In this case, the research focus on teachers' capability and barriers of using ICT at senior-high-school in Sanga desa by identifying the teachers' capability and barriers to the utilization of ICT in education would be a great step to rising the standard of teaching and learning.

ICT

The use of technology in teaching English isn't new for education system. Rank et al. (2011) state that info and communication technology (ICT) provide learners with authentic content. All materials will help students expand their speaking, listening, reading, and writing skills. In the technology and knowledge-based era today, the utilization of ICT in teaching is characterized by technology devices to support teaching and learning activities. Information also helps students increase their understanding because of the use of media technology itself. It has

associated an important role within the field of education to boost the quality of teaching and learning. It conjointly affects teaching and supporting teachers in their education ways and serving to students perceive (Bingimlas, 2009).

Nowadays, students think and learn in different ways. Teachers need to understand and interact with students to adapted teaching approaches and learning strategies. The professional use of technology by teachers includes the planning of different classroom tasks. Preparing educational content, engaging or interacting with peers, students, and parents, finding interactive tools, and drawing up lesson plans (Bebell, Russell & O'Dwyer, 2004). Teachers should know how to consider the focus and desires of students in the classroom. As Liu (2009, p.101), "technology taking part in classroom system as computer-assisted teaching and interactive media technologies. In the listening class, teachers use computers and the network to find an authentic model which helps learners with native pronunciation.

The teachers should open their minds to the integration of technology in teaching. Hsu (2016) states three components of belief to find teachers' classroom technology use. It is a pedagogical, self-efficacy, and the value of technology for students. Pedagogical define as teachers' acceptance in utilizing technology. Self-efficacy refers to the teachers' self-confidence, it closely connects to the skills and knowledge. The last positive value of teachers influences the frequency of using the technology in the class.

Teachers' capability

In this research, teachers' capability divided into three: knowledge, skill and attitude. Inside: it defines as condition of knowing something with familiarity gained through experience or association (Webster, 2018). The present research refers to the teachers' understanding of how to manage ICT for personal use, using ICT as a tool for teaching—understanding the policy dimensions of using ICT for teaching and learning process. Another is mastery of a range of 7 assessment paradigms involving ICT, knowledge of various educational paradigms related to ICT use (Kirschner and Woperies, 2003). Skills: it refers to the teachers' ability the use ICT that includes skills in Internet Experience, skills in Computer Experience, skills in Computer-Mediated Communication, and skills in

Microsoft Office (Al-Furaydi, 2013). Attitude: Attitudes refer to measure a reaction to some referent or object, inferred supported the individual's beliefs. In line with Al-Zaidiyeen (2010), states readiness of mental organized through expertise, exerting a directive or dynamic influence upon the individual's response to all or any objects and things which connected." It means that perspective may be a positive or negative reaction of feeling toward a specific state of affairs.

Barriers

In this case, the teacher needs to learn fastly to use ICT tools, helping facilitate teaching and learning activities/processes. Schoepp (2005, p.5) states integrating ICT in education, significantly into classroom instruction isn't as simple as flipping a switch. It includes integration with the complex method, and result teachers might encounter difficulties or barriers. However, the barriers faced by each teacher to integrate ICT and teaching ways were different. Potter and Szapkiw (2012) state teachers need a shift in thinking to find out and applicate the way to manage learning behavior otherwise as they use ICT within the classroom, it such as the two blades that the one hand ICT are going to be terribly useful.

Vice versa barriers exist from numerous factors. Support this crusader (2017, p.12) states most of the teachers face barriers in applying technology into the teaching method as a result of lack of proficiency. A lot of teachers, not mastery of integrating educational technology in their curriculum. It means the lack of ability impacts the increasing number of barriers that teachers will face. ICT barriers classify into two categories: extrinsic and intrinsic. According to Ertmer (1999), there are external such as access to resources and time.

Next, Intrinsic factors relate to the attitudes, values, behaviours, and resistance to ICT. Support this, Mingaine (2013) states the main obstacles that prohibit school teachers from using ICT effectively are: a) lack of ICT preparation time, b) low ICT practice models, and c) weak school administration.

METHOD

To collect the data, the writer used questionnaires, observation, and interviews for both schools: senior-high-school 1 and vocational-high-school 1 of Sanga desa. After the data of the questionnaire got, the writer chose two teachers to represent with a

maximum and minimum score to be an interview and observed—the analysis used reduction of the text; exploration of the text and integration of the exploration. According to Attride (2001), claims qualitative analysis procedure into three main stages, including the reduction of the text, exploration of the text, and integration of the exploration. Data reduction means the process of selecting, identifying, classifying the data that are considered essential. Next is the exploration of the text, which means the researcher explores and describes data in sentence form. The last integration of exploration means the researcher concludes the data exploration. Also, use categorized based on scores: the interview analyzed by transcribed, categorized, and code. The observation was transcribed descriptively to support the interview results.

This research applied a qualitative descriptive. According to Hamid (2017), qualitative research acknowledges participants' behavior and the researcher understood in context. Issac & Michael (1984, p.73) stated that descriptive research is the kind of research to systematically and accurately describe the situation and facts of a given population. This methodology suited with this research aims to understand teachers' capability, barriers and find the solutions.

In this research, the researcher selected EFL teachers from two schools: Senior-High-School 1 and Vocational-High-School 1 of Sanga desa. The schools have facilities such as a computer lab, computers, laptops, and a projector. The participants were six EFL teachers who teach in major related to ICT were willing to be participants.

In qualitative research to describe the accuracy and credibility to validate, the writer used methodological triangulation, and it employs more than a method to gather the data: questionnaire, observation and interview.

Questionnaire given for completeness of data and gather much information relevant to research needs on teachers capability and barriers. The information obtained will be more prosperous and more complete by the data or additional data from questionnaires. A detailed description of the study's final results was genuinely comprehensive and provided convincing and valid conclusions. The questionnaire gave to the participants (EFL teachers) in senior-high-school1 and Vocational-High-School1 of Sanga desa. The total question was 51 questions and divided into three sections: teacher profile, section two was teachers' capability, and section three barriers.

In doing the observation, researchers design some means for recording notes. It's called field notes. According to Creswell (2012), field notes are text (word) recorded by the research worker throughout the observation during a qualitative study. The researcher used an observation note sheet to describe the result of the observation.

The interview used to got many sources to gain information that could not explain. The researcher used open-ended in the interview section. Next, chose the respondent who represented the maximum and minimum score. Based on the form results, elaborated data is required to enhance the detail of information also complete the data. Interviews session were applied with the teachers as participants. It completes individually and for about 15 minutes with each participant.

RESULTS AND DISCUSSIONS

To determine the scale rating of all answers, the researchers divided into two category; each items (1-51) and aspect (knowledge (10), skill (20), attitude (10), barriers (11) items), the ideal score is used with the formula:

Table 1. *Score of each aspect*

T x Pn (Knowledge & attitude with each 10 items)	T x Pn (Skill with 20 items)	Scale	T x Pn (Barriers with 11 items)	Scale
10 x 4 = 40	20 x 4 = 80	Very good	11 x 4 = 44	No problem
10 x 3 = 30	20 x 3 = 60	Good	11 x 3 = 33	Slightly
10 x 2 = 20	20 x 2 = 40	Medium	11 x 2 = 22	Medium
10 x 1 = 10	20 x 1 = 20	Poor	11 x 1 = 11	Poor

Source: Sugiono (2012)

Below was the result of rating scale

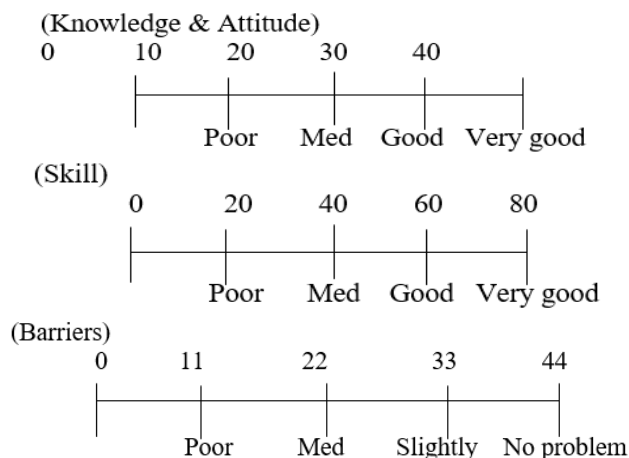


Figure 1. The result of rating scale

Teacher profile

This is a profile of the EFL teachers from senior-high-school and vocational-high-school of Sangadesa. The teachers' profile includes age, gender, last

degree, teaching experienced, experienced use of ICT, time use ICT in a day, and kinds of use ICT tools.

Table 2. *Teacher profile*

Name	Age	Gender	Last Degree	Teaching Experience	Experience with the use of ICT	Spent time in access internet in a day	Kind of ICT use
TEACHER 1	26-30	Male	Bachelor Degree	1-3 years	Less than a year	2-3 hours	Word processing, Spreadsheet, Powerpoint, electronic learning resource centre (CD & Ebook), social media, E-mail, WWW, Wiki, text & video chatting
TEACHER 2	36-40	Female	Bachelor Degree	11-15 years	More than ten years	4 hours and over	Word processing, database, Spreadsheet, Powerpoint, Multimedia(audio&video), social media, E-mail, WWW, Blog
TEACHER 3	31-35	Female	Bachelor Degree	7-10 years	7-10 years	1-2 hours	Powerpoint, Multimedia(audio&video), social media, E-mail, WWW, text & video chatting
TEACHER 4	36-40	Male	Bachelor Degree	11-15 years	1-3 years	2-3 hours	Sosmed
TEACHER 5	36-40	Female	Bachelor Degree	11-15 years	7-10 years	3-4 hours	Word processing, Multimedia (audio&video), social media, E-mail, text & video chatting
TEACHER	36-	Female	Bachelor	11-15	7-10	2-3 hours	Word processing,

ER 6	40	e	Degree	years	years	Multimedia(audio&video), social media, E-mail, Wiki
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Based on the info higher than, the participants of this study were 2 males and 4 females, whereas the age of the participants ranges from 26 to 40 years. For the last education, all the teachers were bachelor degree. Relating to their age and teaching experience 1 to 15 years, their experience with the use of ICT was less than a year until more than ten years. All the participants spent the time for access the internet range one until more than four hours.

The last kind of ICT used, almost all participants used word processing, Multimedia (audio & video), social media, and E-mail.

Teachers capability

After got the teacher profile, the researcher used data in section two in questionnaires. It includes knowledge, skill, and attitude. The red number mark as negative questions.

Table 3. Knowledge results of each item

Respondents	KNOWLEDGE										Total
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	
TEACHER 1	3	4	3	2	4	4	3	4	4	3	34
TEACHER 2	3	4	3	4	4	4	4	4	4	4	38
TEACHER 3	3	2	2	2	3	3	3	3	3	3	27
TEACHER 4	4	3	4	3	4	3	3	3	3	3	33
TEACHER 5	3	3	2	2	3	3	3	3	2	3	27
TEACHER 6	3	3	2	2	3	3	3	3	3	2	27
TOTAL	19	19	16	15	21	20	19	20	19	18	-

The table shows the teachers have "good" information within the mastery of creating personal use of ICT. In terms of a way to use graphic software package, do computer maintenance, and mastery a variety of academic paradigms associated with the utilization of ICT to grasp a variety of academic paradigms associated with ICT use. Others may be categorized as "very good" within

the mastery of creating personal use of ICT within the term of use of Spreadsheet/Excel, Powerpoint and do internet surfing for the new information. Next, they knew how to access kind of ICT tools in teaching, understanding the policy dimensions of using ICT for teaching and learning, and last mastering a range of assessment paradigms that involve ICT use (Zahra, et al., 2019).

Table 4. Skill results of each item

Respondents	SKILL																				TOTAL	
	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q2	Q2	Q2	Q2	Q2	Q2	Q2	Q2	Q2	Q2	Q3		
TEACHER 1	4	4	4	2	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	3	4	76
TEACHER 2	4	1	4	2	4	4	4	4	4	4	3	4	4	1	2	2	2	4	2	4	63	
TEACHER 3	3	1	3	2	2	3	3	2	3	2	3	3	3	2	2	1	3	3	2	3	49	
TEACHER 4	4	1	3	2	4	4	4	2	2	3	3	4	4	1	4	3	3	3	2	3	59	
TEACHER 5	2	1	2	2	2	3	3	1	3	2	3	3	3	2	3	1	3	3	1	3	46	
TEACHER 6	3	2	3	2	3	3	3	3	3	3	2	3	4	3	3	3	3	2	2	3	56	
TOTAL	20	10	19	12	19	21	21	16	19	18	17	21	22	13	18	14	18	19	12	20	-	

Based on the data above, teachers' skill was called "medium" in the skill on internet experienced in creating website/blog, creating & accessing databases, and using a concordance. Next could categorize as "good" in the skill of internet experienced in term of creating & manage Wiki and use electronic learning resource centres (such as CD and E-book). In skill in computer experience in terms of using Real Audio and Windows Media

Player and play Computer Games, as well as in Microsoft Office skills. The last category was "very good" in skill on internet experienced in terms of browsing the internet is easy, downloads Sound Files are familiar with audio and video on the internet, and searches for Online Research. In skill in computer experience in terms of using the language software, and skill in computer-mediated communication.

Table 5. Attitude results of each item

Respondents	ATTITUDE										TOTAL
	Q31	Q32	Q33	Q34	Q35	Q36	Q37	Q38	Q39	Q40	
TEACHER 1	4	4	4	4	4	4	4	3	3	3	37
TEACHER 2	2	4	4	3	4	4	4	2	4	4	35
TEACHER 3	3	2	3	2	3	3	3	3	3	3	28
TEACHER 4	3	3	4	2	3	3	2	3	4	3	30
TEACHER 5	3	3	3	3	2	3	2	3	2	4	28
TEACHER 6	3	3	3	3	3	4	3	3	3	3	31
TOTAL	18	19	21	17	19	21	18	17	19	20	-

Based on the data above, teachers' attitude was usefulness and ease of use. "very good" in all items, including perceived

Table 6. Barriers results of each item

Respondents	BARRIERS											Total
	Q41	Q42	Q43	Q44	Q45	Q46	Q47	Q48	Q49	Q50	Q51	
TEACHER 1	3	4	4	4	2	3	4	3	3	3	3	36
TEACHER 2	3	3	1	4	3	3	3	4	4	4	4	36
TEACHER 3	2	2	1	3	2	3	3	3	3	3	3	28
TEACHER 4	2	3	1	3	2	3	3	4	4	2	4	31
TEACHER 5	2	2	1	3	2	3	1	3	2	3	2	24
TEACHER 6	3	3	1	2	1	2	2	3	2	2	3	24
TOTAL	15	17	9	19	12	17	16	20	18	17	19	-

The teacher barriers were "poor" in teacher ICT skills (teacher level barrier) based on the data above. They faced difficulty in using ICT. Next, for "medium" category in teacher confidence (teacher level barrier), training, access to ICT, ICT Infrastructure (School Level), ICT support on school's overall strategies (School Level), project-related experience (School Level) in term of the school follows an ICT project handled by the government or other parties. The last have "good" category in project-related experience (School Level) in term of The need to prepare for the public examinations does not limit the use of ICT.

Based on an interview, the biggest problem was accessibility for teaching English and time to utilize ICT in teaching. It measures if they don't have enough time to use ICT. Based on observation, teacher one and teacher five taught online in this situation because of a pandemic. The researcher got the information if both teachers used Edmodo to give the assignment and Whatsapp to explain the materials. For using other applications such as zoom and Google classroom, they got a problem in connection. They told if they didn't have enough time to present the material because online teaching gave the teacher a short time to teach.

Next, barriers came from school facilities, and teacher 5 asked if the school have a projector and computer lab. But to use a projector is not efficient

because only one projector and need some of time to prepare to operate it. Besides that problem in access to ICT tools, both teachers have a problem using ICT tools because they didn't have much experience teaching using ICT. Teachers 5 never join the training for education using ICT. If she got a problem accessing or operating ICT tools, she prevents it by learning from the other teacher. Both teachers agreed that ICT training would develop their pedagogical knowledge and skill. Teacher 1 assumes that joining the training it will make the teacher more professional.

CONCLUSION

In line with this research, the result shows if all the teachers have basic knowledge of accessing ICT in teaching EFL. The result of the questionnaire, teachers' capability was category as good. We could say they have readiness in using ICT. The biggest problem was accessibility for teaching English and utilizing ICT in teaching, limited school facilities, teacher training also is the problem faced by teachers. They never join the training that could increase their experience in teaching using ICT tools. Both teachers agreed that ICT training would develop their pedagogical knowledge and skill and make the teacher more professional. Based on the barriers found, several solutions to the barriers. First, support for the development of teachers'

capability should always conduct so that all their ICT knowledge, skills, and attitude are sufficient to implement ICT use. The barriers impeding the success of ICT use in teaching English should overcome. Regular training on the use of ICT, adequate ICT facilities such as solid Internet facilities, computer laboratory come as an utmost factor to be concerned.

To develop the teacher's ICT knowledge, skills, and attitude to use ICT, barriers faced by ICT use in EFL classrooms should overcome. First, Regular training on the use of ICT means teachers should support the school with training, or teachers must join training outside the school to increase their use of ICT and make them professional. Second, the school expected to collaborate with teachers to improve the facilities needed by teachers, such as complete the facilities. It means computer/laptop enough for all students, projector, Wifi for teachers and students. Third, taking the limitation of this study into consideration, additional analysis is sometimes suggested to involve many academics as participants of the analysis to induce loads of general and representative results by applying qualitative.

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