Capturing Technological Pedagogical Content Knowledge (TPACK) Implementation in English Classroom: Necessity or Responsibility?

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ABSTRACT
This study aims to investigate EFL pre-service teachers’ perceptions of technological knowledge development during field teaching practice. Data were collected by using reflections of twelve EFL pre-service teachers in the English Education Department. This qualitative study focuses on the perceptions of EFL pre-service teachers based on the concept of the TPACK framework, especially Technological Knowledge (TK). The result of the analysis showed that EFL pre-service teachers tended to have a positive perception regarding the necessity of their technological knowledge implementation while conducting the field teaching practice in the classroom. Through a thematic analysis method, the data were analyzed qualitatively, and five themes emerged from this study, i.e., the basic technological knowledge of EFL pre-service teachers’, the easiness of EFL pre-service teachers’ in operating technology, the EFL pre-service teachers’ mastery of technological skills, the importance of using technology in teaching, and the importance of having technological knowledge. This study implies that teacher educators should raise the EFL pre-service teachers’ awareness of their technological knowledge development and help pre-service teachers gain a good understanding of technological knowledge.

KEYWORDS
Technological knowledge; qualitative study; EFL pre-service teachers’; field teaching practice

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1. Introduction
Against the background of digitalization, integrating technology into teaching is paramount for teachers to prepare students for a digitalized future (Chai, Koh & Tsai, 2013; Lachner, Fabian, Franke, Preib, Jacob, Fuhrer, & Thomas, 2021; Rahimi & Pourshahbaz, 2018). As a consequence, teachers are required to integrate technology into their teaching to support students’ learning (Reyes, Reading, Doyle and Gregory, 2017; Siddiq, Scherer, & Tondeur, 2016). Despite the potential of integrating technology for teaching, however, research has demonstrated that in many educational systems, teachers rarely adopt technology into teaching (Fraillon, Ainley, Schulz, Friedman, & Duckworth, 2020). Meanwhile, studies show teachers should integrate technologies into teaching in the 21st century for effective teaching and learning (Abdalla & Ali, 2017). Hence, it is generally argued that pre-service teachers should acquire subject-specific professional knowledge regarding technology integration to be able to support their future students’ learning. The professional knowledge related to successful subject-specific integration of technology is commonly

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subsumed under the concept of Technological Pedagogical and Content Knowledge (TPACK) as proposed by Mishra and Koehler (2006). Therefore, in the global context, the researchers’ focus is mostly concerned with how teachers explore technology and not how to implement it into the teaching and learning process (Mishra & Koehler, 2006; Koehler & Mishra, 2009; Koehler, Mishra & Cain, 2013).

In addition to that, integrating technology into teaching has many benefits for teachers and students (Gur & Karamete, 2015; Ekrem & Recep, 2014). It helps students to create interest in learning and enables teachers to change how they think about teaching (Sahin, 2011). In the Asian context, Koh, Chai and Lim (2017) reported one year of research implementing the rubric of TPACK-21CL (Century Learning) with Singaporean pre-service teachers. The result had a positive impact on their teaching practice and students’ learning output. Therefore, it is obviously assumed that pre-service teachers should understand the basic concept of TPACK, especially technological knowledge, in order to help them in creating creative learning with technology.

Previous studies have assessed the relationship and role of TPACK in predicting teachers’ technological knowledge for instructional practices (Fuada, Soepriyanto & Susilaningsih, 2020; Habibi, Yusop, & Razak, 2020; Liang, 2015; Nelson, Voithofer, & Cheng, 2019; Pamuk, 2012; Sari & Sumardi, 2020). In the Indonesian context, Habibi, Yusop and Razak (2020) used the TPACK framework to predict pre-service teachers’ integration of digital tools in their classrooms. Their study indicated that TPACK effectively predicts pre-service teachers’ integration of digital technology during their teaching practices. Another previous study conducted by Cahyono and Kurniati (2016) showed that implementing TPACK into the teaching and learning process has benefits for Indonesian EFL pre-service teachers in improving the quality of their EFL instructional designs and teaching practices (see Also Fitriyana, Setyosari & Ulfa, 2021; Ringotama, 2020).

Though some previous studies about TPACK have been done by some researchers (Paneru, 2018; Schmidt et al., 2009; Sheridan, 2013; Tai, 2015; Tseng, Chai, Tand & Park, 2020; Ulgu & Er, 2016; Wang, Schmidt & Jin, 2018; Yeh, Chan & Hsu, 2021), there is still a scarcity of empirical studies investigating EFL pre-service teachers’ perceptions of Technological Knowledge (TK) which plays an essential role in their teaching practice as EFL pre-service teachers. Therefore, this recent study attempts to fill this gap by focusing on investigating the EFL pre-service teachers’ perceptions of Technological Knowledge (TK) development during field teaching practice in school. The result of this study is expected to investigate the EFL pre-service teachers’ perceptions of TPACK development, especially their Technological Knowledge (TK), during contributing to the field teaching program. This study also will provide benefits for pre-service teachers and in-service teachers in implementing Technological Knowledge (TK) into their teaching and learning process.

2. Methodology
This study applies qualitative research, which aims to know the EFL pre-service teachers’ perceptions of TPACK development during field teaching practice. This qualitative research is an approach to exploring and understanding the meanings that individuals or groups attach to social or human issues (Creswell & Creswell, 2018; Creswell & Poth, 2018; Pickens, 2016). To obtain the recursive data, this study used a narrative approach (Clandinin & Connelly, 2000) to investigate the EFL pre-service teachers about their perceptions of Technological Knowledge development (TPACK) during field teaching practice. This study was conducted at one of the Islamic higher education in Southeast Sulawesi, Indonesia, involving the EFL pre-service teachers who have contributed to the field teaching practice for the academic year of 2022. They were majoring in English Education Department at IAIN Kendari. The participant of this study implemented technology during the process of teaching in high school. The school in which the participants participated is one of the favorite schools in an urban area which provides the availability of teaching materials, facilities, and infrastructure that support the ICT-based teaching and learning process in the classroom. Regarding the TPACK infrastructure of the school, especially technology, the school has a fairly good infrastructure in terms of the availability of an LCD projector, computers, speakers, and adequate electricity. In addition, the school also provides tremendous internet access.

This study involved twelve EFL pre-service teachers from the English Education Department at three Islamic Higher Education in Sulawesi, Indonesia. The recruitment process of all the participants was based on the relationship of the researcher with them as students in the English Education department and their readiness as participants for this study, with the hope that the EFL pre-service teachers can help the researcher to investigate their perception about TPACK development specifically in Technological Knowledge (TK) during field teaching practice. In addition, all the participants in this study who were registered in the field teaching program proved to show their ability to implement technology in their teaching practice at school. They implemented technology in every teaching process because the school can facilitate it. Moreover, the researcher chose the participants because they applied technology regularly when teaching in the classroom, while the others did not apply technology as others did. They must also be participating until this study is accomplished. Regarding the level of IT literate, the technological knowledge level of the majority of participants was good enough. It revealed that most of them could use computer hardware in the form of the input device, the processing device, and the output device. Other proofs were all participants could use software with computer application programs in the form of video players, Microsoft Word, Microsoft Excel, and Microsoft PowerPoint.
To gather the data for this research, the researcher used several procedures to collect the data. First, the researcher incorporated all the reflection questions into the Google Form. Second, the written reflection was diffused to the participants through personal chat on WhatsApp. Third, after a few days, all participants answered the reflection question, and the researcher collected the data. Finally, the researcher conducted an initial analysis of the participant’s responses.

This present study applies written reflections to acquire the EFL pre-service teachers’ perceptions of Technological Knowledge (TK) development during field teaching practice. In collecting the data, the researcher utilized a written reflection as the main instrument of this research. Written reflection is a written story template consisting of a series of questions and blank spaces where participants write their responses (Barkhuizen, 2014). The instruments apply in an online way using the WhatsApp platform. The main reason is that the participants do not hesitate to fill in and answer the questions and also to facilitate the researchers in finding and coding the data. The spreading of these instruments is conducted for copious procedures; firstly, the reflection sheet in Google form will be spread through personal chat in WhatsApp. This kind of instrument allows the researcher to gather detailed descriptions of the data. This is because participants can freely express their ideas and thoughts by writing them down on a written reflection template. This way also serves the accurate, enormous and wide range of obtaining data since they have more times and chances to voice their notion (Hollweck, 2015).

The written reflection questions will pervade a series of questions which are concerning; 1) The basic technological knowledge of EFL pre-service teachers. 2) The EFL pre-service teachers’ easiness in operating technology. 3) The EFL pre-service teachers’ mastery of technological skills, 4) The importance of using technology in teaching, and 5) The importance of having technological knowledge. After the researcher collects the data, then the next step is to analyze the data qualitatively (Michele & Lara, 2020). The data of the EFL pre-service teachers’ perceptions of themes appear from their answers and categorizing (Wong, 2008). It is determined that thematic analysis provides a flexible and useful exploration tool that can potentially provide rich and detailed yet complex credentials. The researcher analyzed the data of the EFL pre-service teachers’ responses from completed reflections. The data collection phase began after participants completed their reflection questions via Google Form, and the researchers used WhatsApp to distribute the reflection questions and then asked participants to fill them.

Furthermore, the identification of the reflection is done through code in the reflection. Data from the reflection were coded to help the researcher identify the data. In coding the data, the researcher used thematic coding or thematic analysis (Braun & Clarke, 2006; Kiger & Varpio, 2020). Thematic coding is a way to analyze data in order to identify patterns or to find themes through data that has been collected by the researcher (Saldana 2016). The theme that was used concerns the EFL pre-service teachers’ perceptions of technological knowledge based on the framework of TPACK (Mishra & Koehler, 2006).

There are some main focus themes targeted in this study those are first, the basic technological knowledge of EFL pre-service teachers’; secondly, the easiness of EFL pre-service teachers in operating technology, thirdly, the EFL pre-service teachers’ mastery of technological skills, fourthly, the importance of using technology in teaching, and last the importance of having technological knowledge. The data was coded using five colors. The red color represents The Basic Technological Knowledge of EFL pre-service Teachers’. Yellow color refers to The Easiness of EFL pre-service Teachers in Operating Technology. Pink color represents The EFL pre-service Teachers’ Mastery of Technological Skills. Grey color indicates The Importance of Using Technology in Teaching. Blue color refers to The Importance of Having Technological Knowledge.

3. Finding and Discussion
The findings of this study reported the results of data analysis of reflection accounts from twelve EFL pre-service teachers as the participants in order to explore how their perceptions about TPACK development, specifically their technological knowledge during field teaching practice. Based on the result of the data analysis, there were several main themes emerged, namely: (1) The basic technological knowledge of EFL pre-service teachers’, (2) The easiness of EFL pre-service teachers in operating technology, (3) The EFL pre-service teachers’ mastery of technological skills, (4) The importance of using technology in teaching, and (5) The importance of having technological knowledge.
1. Table of Finding

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3.1 The Basic Technological Knowledge of EFL Pre-service Teachers

The following were several statements in direct quotations mentioned by the eight participants in their reflection writings. In order to know the basic technological knowledge of EFL pre-service teachers’, the researcher uses written reflection. Reflection was carried out by three participant researchers. Based on the reflection, it is known that the EFL pre-service teachers already have a basic technological knowledge that they have got in college in terms of how to run software products such as an operating system, a software application, or an automated web design tool.

This is in line with the opinion of P1, P2, P3, P5, P7, P8, P9, and P10, which state their basic technological knowledge during field teaching practice in the classroom. This is illustrated in the reflections’ answer:

“I already have basic knowledge of TPACK, especially about technological knowledge, which I have gained in the learning process on campus through courses that I have studied before, especially technology itself. I learned a lot about the basics of using a computer, such as learning Ms. Word, Excel, PowerPoint, etc. Regarding Ms. Excel, I can use it to evaluate student learning outcomes. Meanwhile, Ms. Power Point itself, I can use PowerPoint as a visual tool to display materials or teaching materials in class.”

The participants stated that they already had basic technological knowledge during their engagement in the field of teaching practice in school. They said that they had learned about technological knowledge through the course about basic technology that they learned in college. They assumed that the basic technological knowledge that they had totally come from their experience when learning about technology courses in college. In addition to that, the basic technological knowledge that they had learned, including how to use a computer, Microsoft Word, Excel, PowerPoint, etc. they also added that all of the knowledge about the basic technology really helped them in order to support their teaching activity in the classroom during field teaching practice. For example, they can take advantage of the use of Microsoft PowerPoint in delivering the material that they will teach in the classroom.

From the statement by the participants above, it can be concluded that they have the basic technological knowledge that they got from the technology course in their college. Based on the statement, it can be proven that they already have the basic technological knowledge during contributing to the field of teaching practice.

A similar statement also appeared to the other participant where she stated that she already has the basic knowledge of TPACK, especially technological knowledge that she got in college too. This is contained in the reflections’ answer:

“I already have basic knowledge about TPACK itself, especially technological knowledge like what I got while sitting in college. I am very familiar with technological knowledge such as how to use a computer, LCD projector, make PowerPoint, etc.” (P2)

Based on the statement of the second participant above, she admitted that she has learned about technology and she had familiar with it, such as how to use the computer, LCD projector, make PowerPoint and etc., since she was in college.

The last statement was expressed by the other participants, who also had basic technological knowledge that they had gotten from their lecturer in college. This is contained in the reflections’ answer:

“I have been provided a lot by lecturers about the use of technology in learning. Some of the technologies we involve are we use a lot of applications, such as Google Classroom, Schoology, etc., in order to collect
Regarding the statement from the participants above, they mentioned that they also had basic technological knowledge that they
got from their lecturer through the learning process since they were in college. There are some technologies that they use, such
as the Google Classroom app, Schoology app, etc. They said that those kinds of technologies were amazing because they could
help them in order to collect the assignment. Also, their friend will not be able to copy and paste the assignment because the
application was safe. They added that those technologies were recommended to apply when they become a teacher someday.
These types of technology are categorized as advanced or new technology, as stated by Mishra and Koehler (2006). In addition,
this is in line with a study conducted by Ruggiero and Mong (2015), who stated that teachers still use PowerPoint as a tool for their
teaching in a classroom. In addition, in the process of learning, they are also involved in the creation of technology-based learning
media, such as making PowerPoint presentations and digital comics.

3.2 The Easiness of EFL Pre-service Teachers in Operating Technology

Based on the reflection, it is known that the technology that the EFL pre-service teachers used in the classroom was easy to operate.
This is in line with the opinion of all participants, which states the easiness of EFL pre-service teachers in operating technology in
the classroom. This is illustrated in the reflections’ answer:

“For me, it is very easy to operate, starting from the technology which is already easily accessible, and also I
am used to using it. The LCD projector is indeed easy to operate; for example, I just plugged in some
connecting cables and then connected it to my laptop, and the screen will display the learning material that I
will do through the PPT that I have made.” (P1, P5, P6, P12)

The participants said that the technology that she implements in the classroom is very easy to operate. They mentioned that the
technology that they used is quite simple and accessible to use it. In addition to that, they utilized the LCD projector when teaching
in the classroom because this technology is very easy to operate, as they state in reflection. They only need to connect the cables
of the LCD projector to their laptop, and then the screen of her material will show automatically. The ease of operation of this
technology comes from their habit of using LCDs in the learning process at the campus, such as doing presentations in the
classroom, which indirectly makes me familiar with the procedures for operating LCDs”. Depending with research conducted by
Lestari and Asari (2022) showed that the use of LCD projector and PowerPoint are the most frequently used by participants because
of the ease of use, which impact students’ understanding positively on the material being taught and become more active in class.
In addition, Kalonde and Mousa (2016) explain several factors that influence teachers in choosing the technology used for learning
activities, namely, ease of use, making lessons more interesting, students and teachers becoming motivated and happy, and also
improving the presentation of the material. The technology mentioned by the participant above sounds familiar and easy to use
or access.

A similar perception was also expressed by the second participant, who also felt the easiness of operating the technology that she
used in the classroom. This is contained in the reflections’ answer:

“The technology that I use during the teaching process is easy to operate. I just need to bring my laptop and
projector as extra tools. All you need to do is connect the laptop to the projector; then the PPT will be displayed
the material automatically.” (P2)

In the second participant’s response above, she mentioned that the technology that she used in the classroom was very easy to
operate. She said that she only needs to prepare her laptop and an LCD projector, and then she can connect her laptop to the
LCD; therefore, the PPT, which contains her material, will show automatically. The other statement comes from the third
participant, who also gives a similar perception regarding the easiness of operating technology when she did teach in the
classroom. The third participant also felt the easiness of operating technology. This is illustrated in the reflections’ answer:

“In my opinion, the PPT displayed on the LCD is very easy and simple. I just need to connect the laptop to the
LCD projector by using an HDMI cable so that the LCD can project the image on the laptop. The ease of
operation of this technology comes from my habit of using LCDs in the learning process at the campus, such
as doing presentations in the classroom, which indirectly makes me familiar with the procedures for operating
LCDs”. (P3)
Based on the statement of the third participant above, she said that the technology that she implemented in the classroom was very easy and straightforward to use. She just needs to connect her laptop to the LCD projector by using an HDMI cable to operate the technology. After that, the material will elucidate by the screen. She acknowledged that the easiness of technology operation actually came from her habit when she followed the learning process in college because she often used this kind of technology (LCD projector) when doing a presentation in the classroom. In addition, she also mentioned that the easiness of utilizing the technology is based on her habit when she did the learning process on campus, such as doing presentations. Therefore, she stated that she had familiarity with the method or procedures of operating the technology (LCD projector).

3.3 The EFL pre-service Teachers’ Mastery of Technological Skills

Based on the reflection, it is known that the EFL pre-service teachers mastered the technology that they used during their teaching practice in the classroom because of their habitual factor. As said by P1 and P2:

“I have quite mastered the technology that I use when teaching because I have often used it. For example, I often use an LCD projector and PPT when making presentations in the classroom. So, during PLP II, I have familiar with using it. Moreover, my lecturers on campus also used the same technology, so I was very familiar with it.” (P1)

Regarding the first participant’s statement above, she had mastered the technology that she utilized in the classroom because she often used it (habit), such as when making presentations in the classroom. The technology that she used was an LCD projector and PPT (PowerPoint) in order to deliver her material. In addition, she mentioned that during PLP II, she had familiarity with the technology that she used because her lecturer on campus also used the same technology when they are did teaching in the classroom. Therefore, that is why she mastered the technology that she implemented in the classroom during field teaching practice.

Another statement was also revealed by the second participant regarding her mastery of technological skills during field teaching practice. This is illustrated in the P2 statement as follows:

“I have mastered the technology that I use during the teaching process well. Because when we are in college, we are used to making PPT for each of the existing courses.” (P2)

Based on statement of the second participant above, she said that she had mastered the technology that she used during the teaching process in the classroom because she usually implemented that technology very often when she was in college. For instance, she often makes PowerPoint in every course that she takes in college; therefore, it makes her familiar with the technology. Regarding the EFL pre-service teachers’ mastery of technological skills during field teaching practice, it is indicated that the EFL pre-service teachers mastered the technology that they used during their teaching practice in the classroom because of their habitual factor. This is proved by the second participant’s reflection answer; she said, “I have mastered the technology that I use during the teaching process well. Because when we are in college, we are used to making PPT for each of the existing courses.” The finding also showed that pre-service teachers have a good mastery of technological knowledge. Pre-service teachers were able to use and integrate technology into teaching (Singh and Kasim, 2019; Polly et al., 2020)

3.4 The Importance of Using Technology in Teaching

Based on the reflection, there were several points related to the importance of using technology in teaching, namely: having an interesting learning media, increasing teachers’ value in teaching, and also increasing students’ interest in learning. All of the participants stated that using technology in teaching was very important for different reasons.

This is in line with the opinion of all participants, which states the importance of using technology in teaching. This is illustrated in the reflections’ answer:

“For me, it is important when teaching in the classroom. I am no longer confused about choosing effective learning media for students because technology is now developing very rapidly. Therefore, it can make me easier in order to design or create interesting learning media through the use of available technology.”

The participants stated that teaching in the classroom using technology is important because it can help them to create interesting learning media for their students. Also, it can make them not confused in terms of choosing an effective learning media because they think that nowadays technology has grown rapidly. Therefore, using technology in teaching can make them easier to design and create interesting learning media in order to support her teaching process in the classroom.
Besides, a similar perception was revealed by the second participant, who stated that using technology in teaching is very important because it can be used as an interesting learning medium for the students. This is illustrated in the reflections’ answer:

“I think it is very important to take advantage of the use of technology to support teaching activities in the classroom. It has become a must for prospective teacher students to follow technological developments, which will later be used as interesting learning media in the classroom. The use of technology in teaching is also very important to do because it will be very beneficial for the teacher himself. For example, when the teacher has good technological skills or knowledge, this will add to their value as a professional teacher.” (P2)

From the statement of the second participant above, she said that technology is very important to be implemented in the classroom because it can support her teaching activities in the classroom. In addition, she mentioned that as a pre-service teacher, she must take advantage of technology development, which will help her to choose an interesting learning media in teaching. Other than that, she also said the use of technology in teaching could increase teachers’ value in teaching. For instance, when a teacher has good technological skills and a good understanding of technological knowledge itself, it can be good for her to increase her value as a teacher especially being a professional teacher.

The same thing was expressed by the third participant, which also mentioned that the use of technology in teaching is important because it can increase students’ interest in learning. This is contained in her statement as follows:

“Yes, very important. I think that using technology nowadays will be very helpful in increasing students’ interest in learning because they can feel that learning becomes easier. For example, when I teach in a class where there is no LCD available, I use a WhatsApp group to send material in PPT to students. So, they can access the material easily from their cell phones and no longer need to take notes on the material I explain.” (P3, P5, P8, P10, P12)

Regarding the answer of the participants above, they said that using technology is very important and can be very helpful in order to increase students’ interest in learning. For example, when they did teaching and implement technology into their teaching process, students will feel that learning becomes easier than before because technology provides a simple way in terms of providing material. In addition, when the school did not provide an LCD in the classroom, they said that they could send the material to the students through WhatsApp; therefore, the students could access the material more easily.

In terms of the importance of using technology in teaching, it is indicated there were several points related to the importance of using technology in teaching, namely: having an interesting learning media, increasing teachers’ value in teaching, and also increasing students’ interest in learning. One of those, such as increasing students’ interest in learning, is proved by the third participant’s reflections answer, she said, “Yes, very important. I think that using technology nowadays will be very helpful in increasing students’ interest in learning because they can feel that learning becomes easier. For example, when I teach in a class where there is no LCD available, I use a WhatsApp group to send material in PPT to students. So, they can access the material easily from their cell phones and no longer need to take notes on the material I explain.” This is in line with a study conducted by Ohlson et al. (2013), which stated that it is very important to use technology in the teaching process. Using technology can increase students’ interest in learning because they feel more comfortable, and the learning process becomes easier (Polly & Mims, 2009; Polly, 2014).

3.5 The Importance of Having Technological Knowledge
This part described the research findings and showed the perception of participants regarding the importance of having technological knowledge. The three participants expressed their perceptions by providing various reasons that supported their arguments to be clearer.

The following were several statements in direct quotations mentioned by the three participants in their reflection writings. In order to know the importance of having technological knowledge, the researcher uses written reflection. Reflection was carried out by the three participant researchers. Based on the reflection, there were several points related to the importance of having technological knowledge, namely: supporting professional competence as a teacher, improving teaching quality, supporting career, and developing teaching skills. This is in line with the opinion of P1, P2 and P3, P6, P7, and P9, which state the importance of having technological knowledge. This is illustrated in the reflections’ answer:

“Along with the development of knowledge and technology today, it has become the reason for the importance of teachers applying technological knowledge in the learning process; this can be my support to become a professional teacher who is able to compete in the midst of global currents. It is very important for
everyone as an educator to be in accordance with the new era in terms of technology to make teaching skills more quality because students can only accept according to their interests and will not be interested in things that are not up to date”. (P1, P6)

Based on the perception of the first participant above, she said that applying technological knowledge in the teaching and learning process is very important in this era. She said that having good technological knowledge can support her competence as a professional teacher in the future, especially in the midst of the global current. In addition, she also said that the importance of having technological knowledge could improve her teaching quality in the classroom. For example, sometimes the students will enjoy if the teaching process is appropriate to their interests; therefore, they can be more enjoyable to learn. As a consequence, she applies the up to date technology to support her teaching in the classroom so that the students will enjoy learning and her teaching quality will improve as well.

“It is very important for me as a prospective teacher in the future to have a basic knowledge of TPACK, especially knowledge of technology, to support my career as a reliable and professional teacher.” (P2, P9)

Based on the second participant’s answer above, she also said that having technological knowledge is important, especially for her as a pre-service teacher, in order to support her career in the future. In terms of supporting their career, she said that having technological knowledge can be one of the important factors to support her career as a professional teacher someday.

The other perception was revealed by the third participant, who stated that the importance of having technological knowledge could develop her teaching skills in the future. This is illustrated in the reflections’ answer below:

“Yes, very important. I feel that knowledge of technology will be very helpful for teacher candidates like me to develop my teaching skills in the future. I can develop learning media that are in line with the interests of my students later. Certainly, that would be difficult to do if I didn’t have any knowledge because I would have a hard time seeing things that are trending in children’s learning.” (P3, P7)

Based on the response of the third participant above, she mentioned that it is very important to have a basic knowledge of TPACK, specifically technological knowledge, in order to develop her teaching skill in the classroom. For example, she can use technology as a learning media which connect with students’ interest; therefore, the students will enjoy the class and the class circumstances also fun. And this is one of the ways to develop her teaching skill actually.

In regards to the importance of having technological knowledge, it is indicated that there were several points related to the importance of having technological knowledge, namely: supporting professional competence as a teacher, improving teaching quality, supporting career, and developing teaching skills. One of those, such as developing teaching skills, is proved by the third participant’s reflections answer, said “Yes, very important. I feel that knowledge of technology will be very helpful for teacher candidates like me to develop my teaching skills in the future. I can develop learning media that are in line with the interests of my students later. Certainly, that would be difficult to do if I didn’t have any knowledge because I would have a hard time seeing things that are trending in children’s learning.” This is in line with a study conducted by Alayyar, Fisser, and Voogt (2012) showed that technological knowledge helps teachers to provide a better teaching and learning process.

4. Conclusion
This present study showed that all participants tended to have a positive perception regarding their technological knowledge implementation while conducting the field teaching practice in the classroom. This could be proven through the description of the core theme and sub-themes that emerged in the research findings in interpreting the results of data analysis. This study perceived five main themes.

To begin with, the first theme that emerged from this study was the basic technological knowledge of EFL pre-service teachers. Based on the research finding, all the participants have basic technological knowledge while they are engaged in the field teaching practice in school. Furthermore, the second theme that emerged from this study was the easiness of EFL pre-service teachers in operating technology. In regard to the research finding, all the participants stated that the technology that they used in the classroom was very easy to operate. Moreover, the third theme that emerged from this study was the EFL pre-service teachers’ mastery of technological skills. Based on the research finding, all the participants stated that they mastered the technology that they used during field teaching practice in the classroom. In addition, the fourth theme that emerged from this study was the importance of using technology in teaching.

According to the research finding, all the participants mentioned that there were some points about the importance of using technology in teaching, namely: having an interesting learning media, increasing teachers’ value in teaching, and also increasing students’ interest in learning. Lastly, the fifth theme that emerged from this study was the importance of having technological
skills. Based on the research finding, all the participants mentioned that there were several points related to the importance of having technological skills, namely: supporting professional competence as a teacher, improving teaching quality, supporting career, and developing teaching skills. With regards to Technological Knowledge, this study revealed that most of the participants tend to give a positive perception of their Technological Knowledge development during field teaching practice.

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