CHAPTER I

INTRODUCTION

This chapter discusses the background of the study, research questions, aims of the study, significance of the study, scope of the study, clarification of terms, and organization of the paper.

1.1.Background

During the Covid-19 pandemic, a sudden shift from conventional face-to-face teaching to virtual online teaching took place. Conducted due to school closures around the world, this emergency remote teaching (ERT) became the alternative to providing access to education for the affected learners. According to a report by UNICEF (2020), this closure affected almost all 1.5 billion students from pre-primary to upper-secondary school levels. As for Indonesia, the school closure policy affected 60.2 million learners and 2.3 million educators, according to Rahiem (2020). Not only did ERT have an impact on instruction delivery, but it also had impacts on almost every aspect of learning, such as engagement, motivation, assessment, feedback, and classroom management.

During this period of transition, technology played a significant role in assisting educators and learners doing remote teaching and learning. Among other media of delivery, the digital internet-based medium gained the highest proportion of support from policymakers across the globe. Regarding this, UNICEF (2020) reported that digital instruction was the most common policy in more than 110 countries. According to the report, internet-based instruction was used by 75 percent of countries for lower secondary education and 77 percent of countries for upper secondary education.

In order to help teachers deliver internet-based instruction, different types of digital technology were used to replace conventional face-to-face teaching and learning processes with virtual online ones. Classroom meetings were replaced by video conferencing platforms such as Zoom Cloud Meeting, Cisco Webex, Google Meet, Microsoft Teams, and many others. Meanwhile, learning materials were distributed and assignments were collected virtually on learning management system (LMS) platforms such as Google Classroom, Quipper, Edmodo, and many others. Even teacher-student direct interactions were also replaced by mobile instant messaging (MIM) applications such as WhatsApp, Telegram, Line, and many others (Gozali, Istiqomah, & Widiati, 2022).

Despite the fact that the internet-based instruction was the most common, this medium posed unwanted potential drawback. One of the drawbacks was accessibility. Regarding this, UNICEF (2020) reported that the reach of this medium is relatively lower than that of television broadcasts in most countries. Most learners who are unreachable by the remote learning opportunities mostly came from rural areas and/or poor households as reported by the survey. Additionally, another drawback was mentioned by Hodges, Moore, Lockee, Trust, and Bond (2020) claiming that the faculty members' preparedness for the shift had been one of the main problems in implementing ERT.

Furthermore, technical constraints within the use of technology have also been considered as other important factors to discuss. Tang and Hew's (2017) study suggested that there were four main challenges in the use of technology, specifically mobile instant messaging (MIM), in education. They include inadequate facility support, informal language use, inappropriate utilization, and other side-effects. Although there are several challenges in the use of MIM, the one related to facility support was the most frequently reported one. This is possibly because it deals with the basic requirements, such as device ownership, internet access, and application access. Additionally, Reinders (2018) also pointed out that, regarding the curation of technology in teaching and learning activities, consideration of its functional and pedagogical limitations should also be taken into account.

This consideration related to the functional and pedagogical limitations of a particular technology is in line with the Technological Pedagogical and Content Knowledge (TPACK) framework proposed by Mishra and Koehler (2006). Extending Shulman's (1986) idea of pedagogical content knowledge (PCK), the TPACK framework included technological knowledge as another inseparable part of teaching competence. Therefore, this framework emphasizes the connections, interactions, affordances, and constraints between and among the three aspects—content, pedagogy, and technology (Mishra & Koehler, 2006).

In relation to the implementation of ERT, the teachers' knowledge of technology has never been more important than before due to the massive use of technology in online remote teaching and learning. This is in line with Winter, Costello, O'Brien, and Hickey's (2021) study showing how COVID-19 had positive impacts on the students as well as the teachers. This was also echoed by Becirovic, Bradrevic-Celjo, and Delic (2021), investigating high school students in Bosnia and Herzegovina in terms of their use of digital technology as well as the teachers' support. According to them, the teachers' support in guiding the students to properly use digital technology has been highly important in foreign language learning during ERT. On the other hand, despite the importance of technology in ERT, Meirovitz, Russak, and Zur (2022) reported that teachers did not take advantage of digital technology for pedagogical purposes. Instead, technology was only used as a substitute for face-to-face teaching through video conferencing. However, most studies reflect the important role of technology in remote learning and teaching.

Apart from the above-mentioned studies, researchers have also discussed teachers' use of technology and the implementation of ERT. Bollen, Humphreys, Lin, and Donnellan (2022) reported that teachers generally acquired new knowledge about the online system and were eager to develop their technological knowledge as they became more confident and comfortable using online resources. Additionally, Gozali et al. (2022) did a systematic review of 94 articles researching ELT practices during the COVID-19 pandemic in Indonesia. The study suggests that the use of technologies such as social media, videoconferencing, LMS, and instant messaging was mostly discussed in ELT research during the pandemic in Indonesia. However, the use of these technologies alone is insufficient without the teachers' being able to communicate the topics, learning goals, instructions, and deadlines (Ria, 2021; Sundarwati & Pahlevi, 2021, as cited in Gozali et al., 2022). In short, pedagogical and content knowledge should also be taken into account when integrating technology.

Reflecting on the implementation of ERT during the COVID-19 pandemic, ERT was reimplemented in some parts of Cianjur following the occurrence of an earthquake in November 2022. In response to the earthquake, the Head of West Java Education Authorities offered three alternatives for maintaining education during the post-earthquake situation: online learning, hybrid learning, and shifted learning (Caesaria, 2022). Although there might be differences between COVID-19 ERT and post-earthquake ERT, both serve as an alternative to maintaining education during an emergency situation, as recommended by Baytiyeh (2018).

There have been several studies in relation with the implementation of ERT in the Indonesian context. Cahyadi, Hendryadi, Widyastuti, and Suryani (2022) investigated the implementation and evaluation of ERT in higher education in Indonesia using the CIPP (Context, Input, Process, and Product) framework, involving seven universities and colleges in three provinces in Indonesia. Meanwhile, Nugroho, Ilmiani, and Rekha (2020) examined university EFL teachers' challenges and insights into online learning activities during the implementation of ERT, while Rahmadi (2020) examined specific issues in ERT, including technology use, the distance learning process, and the teachers' adoption level of distance learning. On the other hand, Rahiem (2020) investigated 80 university students' experiences

attending emergency remote learning at a public university in Jakarta. Furthermore, Rahayu and Wirza (2020) investigated teachers' perceptions of online English language learning in terms of its usefulness, ease of use, and attitudes toward online English learning. Lastly, Wakhidah, Erman, Widyaningrum, and Aini (2021) studied 30 elementary and junior high school teachers from different teaching background in East Java regarding their reflections on online learning during the pandemic.

In addition to studies on ERT implementation during the COVID-19 pandemic, researchers also studied remote teaching phenomena conducted in response to emergency situations such as natural disasters. Manurung, Manurung, Mertosono, and Kamaruddin (2020) discussed the implementation of blended learning in a university in Palu post-natural disaster; tsunami, earthquake and liquefaction, whereas Husnawadi (2021) and Khotimah, Apgrianto, Mustofa, Ubaidillah, and Amalia (2021) investigated the implementation of EFL teaching and learning in universities in Lombok after the city was hit by a 6.4 magnitudes earthquake in July 2018. Ayebi-Arthur (2017) and Tull, Dabner and Ayebi-Arthur (2017) investigated how institutions in New Zealand maintained their resilience with e-learning after seismic events in 2010 and 2011. Baytiyeh (2018 & 2019), on another hand, conducted a study on how online learning and mobile technologies can be benefited to maintain education delivery during crisis situations which may lead to school closures.

Despite the numerous studies focusing on the phenomena of ERT, little is known about the implementation of ERT in the post-pandemic era in response to different types of crisis circumstances. This is significant since the implementation of this type of ERT may have different challenges. On the other hand, the lessons learned from the previous experiences in the COVID-19 ERT may benefit teachers in improving their instruction delivery in remote teaching.

Realizing the need to study on ERT implementation in post-pandemic era, it is considered necessary to construct reflective practice applied by the teachers during the implementation of ERT by describing their experiences regarding the integration of technology and how they develop their knowledge to improve the quality of remote teaching. The significance of reflection in responding to the implementation of ERT has been discussed by Hodges and Fowler (2020). According to them, there are three reasons why reflection is needed to respond to the implementation of ERT. Firstly, reflection is a way to collect information from teachers to evaluate the instructional design processes. Secondly, through reflective teaching, teachers will be able to find things from their experiences during ERT that can enhance their teaching practices prior to the crisis. Lastly, ERT may as well be needed in the future since crises can come in any form. Therefore, reflection is needed for better preparedness.

Teachers' reflection of ERT has been the researcher's main focus in several places in the world. Estrella (2020) in Ecuador, Schuck and Lambert (2020) in the Western US, Albo, Beardsley, Martinez-Moreno, Santos and Hernandez-Leo (2020) in Spain, Remmerswaal and Barington (2021) in Japan, Chang (2020) in Korea, and Nugroho, Haghegh and Triana (2021) in Indonesia are a few examples of study in this field. However, most of the studies are conducted in the emergency remote teaching during the COVID-19 pandemic. Therefore, the present study is expected to fill the gap of the study by investigating teachers' reflections during the implementation of ERT in post-earthquake period taking place after the COVID-19 pandemic.

From the above discussion, this study is going to take a look at the teachers' experiences in maintaining the teaching and learning processes during the implementation of ERT as well as how their reflective practice is associated with their development of Technological, Pedagogical, and Content Knowledge (TPACK) competencies before, during, and after the implementation of ERT.

1.2.Research questions

Considering the significance of the research area and its potential implications, this study aims to contribute valuable insights to the field. To achieve this, the following research questions have been formulated to guide the investigation and provide clear guidance for the researcher to address the research objectives. The research questions are as follows:

- 1. How do EFL teachers apply reflective practice during ERT?
- 2. What do EFL teachers' reflective practices say about the teachers' development of TPACK competencies?

1.3. Aims of the study

Considering the research questions and the focus of the study, the objectives of the research were formulated to guide the study and limit the scope of the study. Based on the research questions mentioned above, this study aims to:

- 1. construct the way EFL teachers apply reflective practice during ERT;
- 2. determine the association between EFL teachers' reflective practices and the teachers' development of TPACK competencies.

1.4. Significance of the study

This research is expected to give meaningful contributions both theoretically and practically. Theoretically, this study can serve as empirical information for teachers and future researchers regarding the implementation of ERT in post-earthquake periods. Practically, the findings of this study are expected to give recommendations to teachers and policy makers regarding the integration of technology and teachers' TPACK in EFL teaching and learning during emergency situations which may occur in the future in many forms such as the natural disasters, conflicts, or pandemic. In addition to that, it is also expected that the findings of this study may serve as a basis for future research regarding the teachers' professional development program since this has not been the focus of the present study.

1.5. Clarification of terms

In order to avoid ambiguity or misinterpretations of a number of terms and to ensure that the terms are understood in the way they are presented in this study, the followings are the list of terms defined in the context of the current study.

a. Emergency remote teaching (ERT).

Emergency remote teaching (ERT) is referred to as an instructional delivery enacted temporarily as a response to a particular crisis or emergency situation (Hodges et al., 2020). Unlike the structured distance learning, ERT is more flexible and adaptable for the purpose of maintaining education during emergency situations. In this study, the context of ERT refers to the emergency remote teaching that took place during the spread of COVID-19 and after the occurrence of an earthquake in Cianjur, West Java, Indonesia in November 2022.

b. Reflective Practice.

Reflective practice in teaching and learning is defined as 'thinking about classroom events, experiences or critical incidents, before, during and after their occurrence, in ways that allow for deep introspection and evaluation' (Cirocki & Widodo, 2019). In this study, reflective practice refers to teachers' thoughtful consideration before, during, and after the implementation of ERT through which and from which teachers developed their competencies related to technological knowledge (TK) and its intersections with other elements of TPACK, technological pedagogical knowledge

(TPK) and technological content knowledge (TCK). These competencies are reflected in better awareness of technological tools and more accurate decisions in using certain technological tools in teaching based on the teachers' pedagogical knowledge and content knowledge.

c. Reflection-in-action

Reflection-in-action is defined as the reflection of knowing-in-action which occurs at the present time (Schon, 1983). However, he also argued that the "action-present", the zone of time, may be different depending on the pace. For the purpose of this study, reflection-in-action is referred to as teachers' reflections during the implementation of COVID-19 ERT and during the post-earthquake ERT.

d. Reflection-on-action

Reflection-on-action, according to Schon (1983), refers to the reflection that occurs after the event by looking back at one's past experience. For the purpose of this study, reflection-on-action is referred to as the teachers' reflections prior the implementation of ERT by looking back at what the teachers had experienced.

e. Reflection-for-action

Reflection-for-action is defined as the reflection about teachers' future plans of action aimed at improving or changing the current practice (Farrell, 2013). In this study, reflection-for-action is referred to as the teachers' reflections for future possible ERT.

f. TPACK

TPACK, which stands for Technological, Pedagogical, and Content Knowledge, is a framework proposed by Mishra and Koehler (2006). According to that, teachers are now required to have the knowledge on how to use technology and apply them in practice alongside with the pedagogy and content knowledge. For the purpose of this study, TPACK refers to the teachers' ability in combining their knowledge of technology, pedagogy and content for the purpose of conducting remote teaching in post-earthquake period. As this study focuses on the integration of technology, only

technological knowledge (TK) and its intersections—technological pedagogical knowledge (TPK) and technological content knowledge (TCK)—are emphasized in this study. The emergence of these themes is generated from the teachers' narratives and interview responses of storied experiences.

1.6. Organization of the paper

Chapter I provides the background, research questions, aims of the study, scope of the study, significance of the study, clarification of terms, and the organization of the paper.

Chapter II explains the theoretical foundation and related research regarding the research topic. They include emergency remote teaching, reflection in teaching, technology in language learning and related previous studies.

Chapter III discusses the research design, research site and participants, data collection, and data analysis.

Chapter IV presents the findings of the study followed by discussions based on the research questions

Chapter V summarizes the paper by presenting the conclusion, implications and limitations of the study, and suggestions based on the findings.

1.7. Concluding remarks

This chapter has presented the introduction of the research proposal. It covers the background, the research questions, aims of the study, significance of the study, clarification of terms, and organization of the paper.