



Exploring EFL Teachers' Perceptions, Practices, and Challenges on ICT Integration in Teacher Professional Development

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Abstract. The development of information and communication technology (ICT) has opened a lot of opportunities for English as a foreign language (EFL) teachers to improve their professional development through multiple ways and sources. However, there are still limited studies that investigate how ICT could help EFL teachers enhance their competencies as professional EFL teachers. This study investigated EFL teachers' practices of integrating ICT into their professional development activities, i.e., EFL teachers' perceptions, practices, and challenges. This study employed a qualitative method with a case study design to gain the data. Four EFL teachers who teach in different high schools were recruited to participate in this research. A semi-structured interview was used to collect the data. The results showed that all participants had positive perceptions of ICT utilization in their professional development activities. Besides, the EFL teachers have utilized ICT tools to help them do their teacher professional development (TPD) such as gaining learning sources, interacting with others, doing administrative tasks, joining online teacher training, and facilitating teaching activities. The competencies that the teachers try to enhance through ICT-integrated TPD are understanding subject matter, pedagogical knowledge, administrative tasks, professional knowledge, and quality of teaching and learning processes. However, teachers encountered several barriers in the practice, e.g., lack of facility, being unfamiliar with ICT tools, poor internet connection, and students' lack of facility.

Keywords: ICT-integrated TPD, ICT Tools, Teacher Professional Development (TPD).

1 Introduction

The utilization of ICT in ELT has become very prevalent in this era since it has benefited the ELT field in many ways, such as improvement of core English skills, e.g., writing, speaking, reading, grammar, and listening (Drigas & Charami, 2014; Luthfiyyah et al., 2021; Syafriyadin et al., 2021) and learners' autonomy (Jayanthi & Kumar, 2016; Pratiwi & Waluyo, 2023). With all the facilities provided by ICT use in the ELT field, the opportunities for improving EFL teachers' professionalism are

widely open. In other words, in addition to helping EFL teaching and learning, ICT use is also beneficial for EFL teachers to help them do their professional development agendas, such as getting easier access to learning sources, choosing their focus of professional development, flexibility in learning time, having collaboration, finding a learning community, doing easier administrative processes, and enhancing digital skills (Lightfoot, 2019).

Despite all the conveniences provided by ICT to ELT, there are still multiple problems found in its practices. A study by Correos (2014) showed that the most problematic things that cause trouble in ICT use for teachers are inappropriate resources, lack of time in preparing lessons using technology, and lack of ICT training. Another study from Hashemi and Kew (2021) also reported that the three biggest problems with the use of ICT in English language teaching are lack of teachers' confidence in using technology, lack of effective training, and lack of time. These problems are still focused on ICT-integrated ELT teaching and learning. There are still limited sources that address the case from the view of ICT-integrated EFL teacher professional development. Hence, further investigation on EFL teachers' perception of and practice of ICT use in TPD needs to be conducted to see EFL teachers' attitudes toward it and whether there are challenges that appear from its practices.

There have been many studies that investigate ICT-integrated activities in the EFL field. However, most of the studies focused on ICT integration in teaching English and learning English process. Some studies exploring ICT-integrated teaching and learning English are concerned with EFL teachers' perspectives, reasons for integration, barriers, and practices of ICT-integrated ELT (e.g., Arigusman et al., 2018; Hafifah, 2019; Dewi et al, 2019; Khan & Kuddus, 2020; Lubis, 2018; Ritaningrum, 2019; Rodliyah, 2018). There are still limited sources that explore ICT utilization in EFL teachers' professional development activities. Furthermore, Lightfoot (2019) stated that there have been many researchers who investigated the utilization of ICT in learning English as opposed to those who researched how ICT could potentially be used for the effectiveness of TPD.

Investigating EFL teachers' perceptions of and practice of ICT integration in teacher professional development is critical to identifying the teachers' attitudes and challenges that they face in utilizing ICT to enhance their competencies. Furthermore, it could also see the ICT-integrated TPD practices that teachers have done so far and how it benefits them in terms of improving their professionalism. In addition, this study is expected to be significant in providing literature on ICT-integrated TPD, especially on EFL teachers' perception and practice. Practically, this study could portray EFL teachers' practices in using ICT to improve their professional competence and how far the implementation of ICT-integrated TPD is done by the participants. Thus, this study aims to explore EFL teachers' perceptions, practices, and challenges in the utilization of ICT in their continuing professional development program activities.

2 Literature Review

2.1 Teacher Professional Development

Professional development for teachers is perceived as all activities intended to increase the teachers' knowledge, skills, expertise, etc. (OECD, 2013). Similarly, Evans (2002) adds that teacher development is a process where teachers improve their professionalism including skills, practice, and knowledge. Furthermore, professional development is seen to be a good activity through which teachers improve the quality of their teaching which hopefully impacts the accomplishment of the students in the learning process (Petrie & McGee, 2012). TPD can be done in multiple ways, ranging from formal to informal ones (OECD, 2013).

Seen from the models of teacher professional development, Gaible and Burns (2005) argue that there are three types of TPD model, namely standardized TPD program, site-based TPD program, and self-directed TPD program. Meanwhile, Richards and Farrell (2005) explain that TPD could be conducted in four kinds of activities: individually, with a colleague, in a group, and under institutional instruction. Several examples of TPD are workshops, self-monitoring, teacher support groups, keeping a teacher journal, peer observation, peer coaching, team teaching, and action research.

2.2 Competencies of Professional Teachers

According to law number 14/2005 on teachers and lecturers in the context of Indonesia, there are four competencies that teachers and lecturers must have, namely pedagogical competence, personal competence, social competence, and professional competence. Hatta (2018) has clearly explained those four competencies needed to build teacher professionalism. First, pedagogical competence deals with the teacher's ability to manage, arrange, and make a good teaching and learning process as well as a good understanding of the characteristics of students. Second, personal competence has something to do with teachers' attitudes or good characters which glorify commendable moral values so that teachers can be seen as good role models for students. Third, Social competence is about teachers' ability to communicate with their surroundings. Fourth, professional competence refers to teachers' ability to master and thoroughly understand their field of knowledge as well as the methodology and structure of that discipline.

2.3 ICT Role in Teacher Professional Development

ICT provides multiple advantages in teacher professional development activities. Haddad and Draxler (2002) say that the utilization of ICTs could be particularly beneficial to assist the process of pre-service teacher training for example by opening wider access to abundant sources of education, providing examples or simulations of high-quality teaching practice through multimedia, providing an easier opportunity to have collaboration with teacher educators, etc. According to Lightfoot (2019), some benefits that ICT could give to TPD activities are (1) access, flexibility, and choice; (2) collabora-

tion, community, and inclusion; and (3) improving administrative processes and transferable digital skills. It indicates that ICT-integrated TPD practices could provide some benefits that traditional TPD practices could not.

3 Method

This research study employed a qualitative approach method and case study as the design. In a qualitative approach, researchers seek meaning within individuals' experiences by having intimate and extensive interaction with them in a specific context and giving participants chances to elaborate their answers (Mack et al., 2005; Gay et al., 2012). A case study method mostly deals with a study seeking questions with questions about how and why questions, little to no intervention over the events, and a focus on contemporary phenomena instead of entirely historical phenomena (Yin, 2018). Thus, the qualitative approach will be suitable for gathering the data to answer the research questions as this study seeks to gain in-depth information about perceptions, ways of integration, and challenges.

The researcher invited 4 in-service English teachers who teach in different high schools in Bandung Regency to participate in this research study. The participants of this research were selected based on purposive sampling. The teaching experience of the teachers ranges from 3-8 years. The participants of this study are English teachers who have already been familiar with the ICT-integrated teaching process. English teachers with experience in ICT-integrated activities are likely to be good participants because they have experience from which they could reflect and to be explore further.

The research interview was a data collection technique where the researchers asked some questions from the participants through verbal communication (Crano et al., 2016). Conducting an interview is a good qualitative approach to collecting information about people's opinions, personal feelings, experiences, and how people perceive certain phenomena (Mack et al., 2005). The type of interview employed in this research study was a semi-structured interview. Gay et al. (2012) explain that a semi-structured interview is a combination of unstructured and structured interview approaches where the researchers prepare a set of questions to be asked in the interview section with opportunities to ask follow-up questions. This type of interview is considered a good way for this research because this study is intended to get in-depth information from the EFL teachers' perception of the ICT-integrated teacher professional development activities, such as the benefits, challenges, attitudes, reasons, and ways of integration.

The researcher contacted potential participants through WhatsApp personal chat to begin with. This first step was to ask for the willingness of the teachers to participate and explain the aims of the research to them. The participants were informed about the interview as well. All necessary things regarding the interview were discussed with the participants, such as the time, confidentiality, permission to record the interview, etc. The interview session was conducted through Zoom meetings to make it more accessible and flexible in terms of time and distance. Each session of the interview lasted around 15-30 minutes.

To analyze the data, as explained by Gay et al. (2012), there are three steps. First, recognize some potential themes that might emerge from the data by thoroughly reading the transcribed interview. Second, describe the context of the study. i.e., the participants, the setting, and the phenomenon being investigated. Third, group the common ideas into categories.

4 Findings and Discussion

4.1 EFL Teachers' Perception of Integrating ICT to TPD

All participants responded positively to the integration of ICT in teacher professional development activities due to some reasons such as giving flexibility, facility of teaching, and providing easier administrative tasks.

"I think the existence of technology will be very helpful in improving my professionalism as a teacher because everything is related to technology in this era, such as online video conferences." (Teacher 1)

"I think ICT is very helpful in TPD, for instance, teachers could get various sources and be able to use a variety of media, so that the learning process is not boring and this is compatible with the modern era. Teachers can join webinars, training, etc." (Teacher 2)

"It is supposed to be helpful because if the teachers are good at using technology, it will facilitate them in many things such as evaluation and teaching." (Teacher 3)

"ICT utilization surely influences teacher professionalism. I plan to use a feature live session on Instagram because the number of participants is unlimited so I can invite all classes. I even plan to utilize TikTok to make educational content because many students use TikTok. It will make our work effective and efficient." (Teacher 4)

All participants expressed their positive attitudes with some reasons behind them such as interaction with no boundaries, creating more interesting teaching and learning processes, facilitating easier administrative tasks, a medium to connect teacher and students more easily, and a means of making creative learning content. The benefits mentioned by the teachers are in line with Lightfoot (2019), arguing that teachers in this current era can get involved in TPD regardless of where they are, and teachers could have a better experience doing their administrative tasks with ICT-assisted activities. Regarding improving the quality of the teaching and learning process, Ghavifekr and Rosdy (2015) reported that ICT-integrated activities could provide active, interesting, and effective teaching and learning processes and it is comparatively better than traditional teaching and learning processes without ICT tools.

4.2 EFL Teachers' Practices of Integrated-ICT TPD Activities

Getting Learning Sources. The four participants do their professional development activities by making use of ICT tools as media to get material sources. The materials the teachers get become sources to enhance their understanding of several things.

"I looked for learning materials or references from YouTube to improve my competence as an English teacher, such as understanding topics that I'm still not sure about. One day I did not understand how to insert the scores into a report book with Ms. Excel. Then I watched YouTube to learn. Sometimes, TikTok is also helpful with Ms. Excel formulas as there are a lot of educational contents." (Teacher 1)

"I joined seminars and utilized PMM applications or websites regarding how to be a teacher in this era and improve professionalism. It provides the definition and development of the Merdeka Curriculum and how to adapt it to students in this era. Besides, there are materials about arranging learning objectives, assessments, modules, giving reflection, differentiated learning, and guidance and counseling. In addition, there is an application called Guru Berbagi. I learned to make lesson plans from it." (Teacher 2)

"I only use technology to find materials or references. I watch YouTube to learn how various teaching methods are practiced." (Teacher 3)

"Besides participating in teacher training, I often watch tutorial videos on YouTube, for example how to make a report book fast and efficiently by using spreadsheets in collaboration with slides." (Teacher 4)

The teachers use technology to find materials for improving their understanding of subject matter (teachers 1 & 3), pedagogical knowledge (teachers 1, 2, & 3), and administrative tasks or professional competence (teacher 4). It is in line with the results of another related study conducted in the Indonesian context from Aprianti (2017), revealing that EFL teachers primarily do ICT-integrated TPDs to improve their understanding of subject matter and pedagogical knowledge.

In the context of other countries, teacher educators make use of the internet to find reputable journals as sources of learning and keep them updated regarding issues in their profession (Ngao et al., 2022). Similarly, most English teachers in 7 countries from South Asia have utilized mobile phones to access desired teaching and learning materials (British Council, 2015). In addition, Haddad and Draxler (2002) say that the utilization of ICTs could be particularly beneficial to assist the process of teacher training by opening wider access to abundant sources of education and providing examples or simulations of high-quality teaching practice through multimedia. Compared to the result of this study, it could be seen from the case of all participants that they use YouTube or TikTok because they want to get real examples of the practice, showing practices of informal TPD.

Interacting with Others. All participants use ICT tools as a means of reaching other people. Interacting with other people is also part of professional development activities done by the teachers to improve their competence by sharing information with others and to run their social interaction with others (law number 14/2005, in Hatta, 2018).

"Because I am a homeroom teacher, I usually use WhatsApp to communicate and share information regarding the learning process. Furthermore, I communicate with parents only to share information. If they find any

problems, they can contact me personally to have a discussion.” (Teacher 1)

“To fellow teachers, I use Instagram, Telegram, and WhatsApp. I use WhatsApp for one teaching unit. As for Instagram, I have a friend with a similar profession so we can share about teaching.” (Teacher 2)

“I utilize WhatsApp to inform about the upcoming learning process and share reading references for the students.” (Teacher 3)

“I made a WhatsApp group for each class as a means of communication to share assignments, information, and additional materials. Sometimes I ask the students to join a meeting on Google Meet to deliver information. Besides, we have an MGMP (English teacher association) group, and we discuss updated information about curriculum, the newest teaching method, and utilization of technology.” (Teacher 4)

Participating teachers make use of ICT tools to keep in touch with others. Teachers 1 & 3 use WhatsApp & Teacher 4 utilizes Google Meet to communicate with the students to disseminate important information. Besides, teachers 2 & 4 use ICT tools as a facility to interact with fellow teachers to discuss teaching information. The activities are in line with the British Council’s (2015) findings, showing that English teachers in 7 countries in South Asia mostly interact with experts and other teachers and participate in social groups for continuous professional development, e.g., learning groups on social media. Furthermore, Mukuna (2013) affirmed that ICTs have opened better access for teachers to approach professional associations to get mentorship, support, or partnership without distance issues.

Doing Administrative Tasks. All participants utilize ICT tools to help them get their administrative tasks done. ICT tools provide teachers with easier ways of doing their work. As professional teachers, the participants have a lot of administrative tasks to do besides teaching in the class.

“I utilize technology in my work as a teacher, for example, Ms. Word that helps me type. I use Ms. Excel to do my report book for a more efficient process.” (Teacher 1)

“My school and I have used Quizizz for assessment at the end of the semester and we have used Google Form to assess at the end of the year.” (Teacher 2)

“I have used Ms. Excel because there are ways to calculate the average score and insert the score easily and fast.” (Teacher 3)

“I always use digital media in teaching, administrative and grading processes, such as spreadsheets and Google docs. It can make our work more efficient and faster.” (Teacher 4)

All participants stated that ICT tools help them do administrative tasks faster and more efficiently. The results of this study support Lightfoot's (2019) statement, arguing that technology could provide better experience for teachers in dealing with administrative tasks. For instance, the availability of tools on the computer will enable teachers to

input and analyze the result of evaluation. They add that ICT tools could help make teachers spend less time on administrative tasks and focus on teaching the students. Additionally, Mwalongo (2011) showed that ICT helped teachers with multiple administrative things, such as a form of depositories of various teachers' documents, and preparing school reports, announcements, & letters.

Participating in Online Teacher Training. Teachers 1, 2, and 4 use ICT tools to get access to teacher training or workshops to improve their competence as professional teachers. However, teacher 3 did not say that he once joined teacher training or workshops online.

"I once joined a training program via Zoom meeting about how to make interesting PowerPoint in teaching English." (Teacher 1)

"Then there is an application called Guru Berbagi where I can join a seminar on how to make a lesson plan." (Teacher 2)

"The teacher trainings or workshops were offline and online via Zoom and Google Meet. Google master trainer that I joined was online in the entire program." (Teacher 4)

The teachers utilized ICT tools to help them improve their professionalism by joining workshops or teacher training conducted online, such as online training to make interesting PowerPoint (teacher 1) & how to make a lesson plan through the Guru Berbagi application (teacher 2). The experience of doing professional development via online training is consistent with Lightfoot' (2019) idea, saying that ICT tools create a world without limitation where teachers can learn wherever they are to improve their professional competence, promoting equality and easy access as well as spreading more chances for teachers to participate in TPDs (Robinson, 2008). Additionally, a previous study in the Indonesian context from Jati (2023) reported the implementation of a MOOC program which managed to be an alternative to traditional TPD programs since it covers a large-scale audience and minimizes distance and time issues, indicating that TPD in a large scale is possible with ICT integration.

Facilitating Teaching and Learning Processes. All participants stated that the utilization of ICT when conducting teaching and learning processes is beneficial. What the participating EFL teachers got from ICT-integrated teaching is a better experience of teaching English to learners as they consider ICT tools as helpful elements in presenting and accessing more various learning materials (as in case of teacher 1 and 3) as well as implementing creative and innovative teaching activities (as in case of teacher 2 & 4). Thus, ICT utilization in teaching and learning practices is considered an integral part of the TPD process in which they practice the implementation of teaching English in more creative, fun, and innovative ways. Besides, it is closely related to the enhancement of pedagogical competence, mastery of processes and practices or methods of teaching and learning (Mishra & Koehler, 2006), which teachers must have to be more professional educators following government regulation regarding competencies of teachers and lecturers in Indonesia (Hatta, 2018).

“In addition to finding learning materials in textbooks, I looked for learning materials from YouTube to improve my competence as an English teacher.” (Teacher 1)

“I use a laptop, projector, smartphone, and sound system in the teaching and learning process. For the software I use Quizizz for examination, Google form, YouTube, and Canva.” (Teacher 2)

“I only use technology to find out materials or references, for example, names of animals on Google. If we only explain orally, they are forced to imagine, so if they cannot imagine I ask them to search on Google.” (Teacher 3)

“I even made a mini website in the learning process that I open with Google site, hopefully, the students can access various learning sources such as digital books, videos, and questions that I integrate with Quizizz so that students can do it at home as a form of self-learning.” (Teacher 4)

The English teachers stated that they can use ICT tools as a facility to help them conduct the teaching and learning process. Teachers 1 and 3 said that they used the internet (e.g., Google and YouTube) as references to find learning materials. It is in line with studies from Ritaningrum (2019) and Arigusman et al. (2018) that stated that the internet provides learners with abundant materials for sources of learning and learners could practice their English abilities with the help of ICT tools.

Besides getting learning materials, ICT tools help teachers evaluate and collect learning materials. Teacher 2 stated that he could do a learning assessment with the Quizizz application. Meanwhile, teacher 4 could make use of ICT tools to create a mini website to collect learning materials that can be accessed by the students wherever they are so that they can study autonomously.

Thus, it shows that ICT tools could enable teachers to create more innovative, creative, and fun ways, which is in line with the findings from Ghavifekr and Rosdy (2015), suggesting that teachers could practice the knowledge that they get from previous activities discussed above (learning from online materials, virtual teacher training, or online interaction with others) in real practice to have better teaching application as a form of TPD processes.

4.3 EFL Teachers' Challenges of Integrated-ICT TPD Activities

In the practice of integrating ICT into their professional development, the participants faced some problems.

“When I need to know how to make an effective learning process, I often get confused to find out what website that should be used. If I have problems, I do not know what application or website that can be used to solve our problems.” (Teacher 1)

“For me sometimes we need to have the right sources because there are many things available, and we have to adapt to the environment and our student's ability.” (Teacher 2)

“The main problems are the connection and capital because we need to buy tools such as laptops.” (Teacher 3)

“The primary obstacle is tools like smartphones because not all students have a phone. Then, they do not get a good internet connection.” (Teacher 4)

The problems deal with access (tools and internet connection) and skill. Teacher 1 stated that sometimes when he learned something on YouTube videos, he needed to have the same type of hardware as used by the people on the video to be able to implement it. Therefore, he cannot apply what he studied to his context. Besides, both teachers 1 and 2 stated that when they wanted to find something on the internet, they found difficulty looking for the right sources due to a lack of familiarity with a variety of ICT tools. The problems faced by the participants in this research study are in line with Ngao et al. (2022) and Lightfoot (2019), stating that digital illiteracy and limited ICT tools are the problems usually found in ICT-integrated TPD.

In addition, particularly in the Indonesian context, a study from Jati (2023) concerning MOOC as a technology-focused TPD for Indonesian EFL teachers showed a similar problem, which is the internet connectivity barrier. As for the issues of technological knowledge in TPD, Sumarsono (2022) found that many EFL teachers, especially senior ones, still need assistance in utilizing ICT tools due to a lack of ability to use technological devices. The findings of challenges in utilizing ICT for purposes in this study have confirmed results from other related studies (e.g., Aniq & Draji, 2019; Mahdum, 2015; Prasojito et al., 2020) which assessed EFL teachers' TPACK in many cities in Indonesia. Most studies revealed that many EFL teachers lack technological knowledge, suggesting that they are not familiar with many types of technology and how to operate them for teaching English and TPD. It shows that problems with internet connection and technological skills are still commonly found among EFL teachers in Indonesia.

5 Conclusion

The results indicate that all EFL teachers have positive perceptions of ICT-integrated TPD activities. In terms of practice, ICT tools help EFL teachers in many ways, for example finding materials, interacting with others, doing administrative tasks, facilitating the teaching and learning process, and joining online training. The competencies that teachers try to enhance through ICT-integrated TPDs are understanding subject matter, pedagogical knowledge, administrative tasks, professional knowledge, and quality of teaching and learning process. However, all participants admitted that there were some problems during the practice, for example, unfamiliarity with the right sources to use (Teachers 1 and 2), lack of tools and bad internet connection (Teachers 1 and 3), and difficulty in involving students in learning activities that require ICT tools (Teacher 4).

Further studies could be conducted to investigate the same topic with a larger number of EFL teachers as the participants because this research only involved four EFL teachers. Besides, further research could use more instruments such as questionnaires and observations to have a better picture of the issue.

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