Continuing Professional Development and English Language Teachers' ICT Uptake

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Abstract: This paper presents the discussion on the impact of Continuing Professional Development (CPD) to English language teachers' decision and performance in the use of Information and Communication Technology (ICT) in teaching. This study carried out a multiple study on two different teachers from different institutional and academic status background in Indonesia. Interviews were carried out to the participant to obtain deeper information concerning their experience in different types of CPD, and how it could influence the way they perceive ICT usefulness and enhance their teaching performance. The result of this study is expected to provide practical contributions particularly to the policy makers to improve teachers' competences by designing appropriate curriculum and CPD in accordance with the teachers' need in the digital era. The result of study indicated that both teachers tended to develop their TPACK (Technological, Pedagogical and Content Knowledge) competences from informal CPD they had from informal co-learning with colleagues and informal network learning from online resources. They also pointed out that governments provided teachers with online-based training that they could access to governments' official websites.

Keywords: CPD, English language teaching, ICT uptake, TPACK

INTRODUCTION

Continuing Professional Development (CPD) focusing on technology use to education quality in digital era, particularly post-pandemic has been an important concern given by all educational stakeholders, especially policy makers and institutional leaders, across the world. Continuing Professional Development is ''processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators, so that they might, in turn, improve students' learning" (Guskey, 2000). CPD is expected to provide teachers with pedagogical and skill development related to teaching contexts (Ravendpour, 2019). Therefore, present teachers are not only required to teach the materials to students, but also supposed to be adapted to the development of technology for educational improvement.

Nonetheless, CPD application in the digital era should focus on not only teachers' pedagogical competence and subject knowledge but also technology competence, in which

it is widely known as TPACK (Technological, Pedagogical and Content Knowledge), developed by Mishra and Kohler (2008). Moreover, the development of CPD on technology should fit teachers' needs (Alivi, 2022), and the expected successful change in teachers' attitude toward teaching requires an extensive process (Robinson & Sebba, 2004). Likewise, Richards and Farrell (2005) highlight that professional development programs should be continuous and could give teachers a long-term development goal to allow them grow and understand their need and role as teachers. In Indonesia, teachers can join PPG as the government's program to uplift teachers' professionalism. This program is needed to provide teachers with variety of teaching methodologies and learning conditions (Jayanti & Norahmi, 2014). Embracing and adapting to different learning conditions and being able to select appropriate strategies for students help to create the pathway for teachers to be more professionalism in facing many obstacles in the process of teaching and learning.

Rienties, et al. (2013) carried out action research about the impact of online CPD focusing on the TPACK model to see the change in the participants' beliefs and use of ICT. There were 33 participants from nine different higher education institutions across th world to complete pre-test and post-test. The result showed the change in the participant TPACK skills after the 12-weeks CPD program, and they had more positive attitudes to use technology in teaching with the TPACK concept. However, the participants' belief and use of technology was still teacher-centered in practice. Changing teachers' belief and attitudes requires a long-term process (e.g., Ertmer, 2005; Marsh, 2007), hence, suggesting the need of CPD programs should be regular, long-run designed, and focus on teachers' need (Rienties et al., 2013; Alivi, 2022: Ghamdi, 2015). These long efforts are needed to continue to reach the expected development in teachers' belief as well as their skill in using the technology to support the objectives of education.

Information and Communication Technology (ICT) CPD is required for teachers particularly in English language teaching contexts as many teachers are still not familiar on innovation or new technology use in teaching without given explicit training policy or leaders' pressure (Alivi, 2022; Ghamdi, 2015). In addition, Language teaching practice is considered to require technology more in practice compared to other subjects due to its affordance to access to authentic materials and language practice (Alivi, 2022; Ghamdi 2015). Moreover, enhancing teaching practice using technology in English language teaching could improve students' active engagements, therefore, developing student-centred learning (Kessler & Hubbard, 2018; Wang et al., 2020).

CPD is classified by Lieberman (1995) into formal and informal professional developments. The formal CPD is obtained by teachers from formal teaching environments, or direct teaching such as seminars, workshops, conferences, classes, or courses. The informal CPD refers to learning experiences from informal contexts beyond direct teaching such as discussions with colleagues, carrying out research, networking, or self-directed learning from reading academic journals. These experiences are also in line with the ideas that teachers need to have skill in managing the class and good social behavior (Norahmi, 2017). By owning the professionalism and sense of collaboration with other educators or colleagues, teachers would have more opportunities to develop their learning experiences regarding personal betterment in doing the teaching and learning process.

However, many studies reported that the development of formal CPD in English language teaching did not focus on TPACK yet, and they blamed the policy makers (i.e., governments) or institutional leaders for the lack of concerns on TPACK and irregular CPD programs (Alivi, 2022; Ghamdi, 2015; Lawless and Pellegrino, 2007). On the other hand, some studies showed that teachers gained TPACK development from informal CPD such as colleagues (Alivi; 2022; Kumar & Daniel, 2016; Oakley & Pegrum, 2015) despite having the formal one from their institution (Oakley and Pegrum, 2015). Furthermore, Alivi (2022) reported a study on ELT ICT uptake in Indonesia that some teachers developed their TPACK more from informal CPD such colleagues, students, YouTube, academic journals, and teachers' role model (i.e., following their teachers' teaching styles when they were students). According to the previous studies, it is implied that teachers are inclined to develop their ICT uptake in teaching from informal CPD than the formal one. This may be influenced by their dissatisfaction with the formal CPD programs for example, not flexible on their preference, inadequate programs given by institution, and limited opportunities of joining the programs due to teachers' status or funding (Alivi, 2022).

Responding to the previous studies on the influence of formal and informal CPD on ICT uptake, it is considered important to explore how different types of CPD have impacts on teachers' attitudes toward ICT use in English language teaching contexts. Hence, this study purposes to look at the ICT CPD experiences had by higher education institutions' teachers in Indonesia as a context. In particular, this study aims to explore how English language teachers enhance their TPACK and pedagogical practice. There were three main points this study looked into consisting of types of technology teachers' use in teaching, including the decision rationales of the ICT use; the impact of formal CPD to their ICT uptake, and the influence of informal CPD to their decision of ICT use in teaching

METHOD

This study conducted a qualitative approach with a multiple case study as a research design. A case study was used to obtain a profound comprehension about why and how a phenomenon happens in a real-life context (Yin, 2018). In addition, the phenomenon or the case the study was selected due to the uniqueness of the contexts (Simons, 2009). A case in a case study design can be a person, a group, a place, a phenomenon, an institution, an organization, or other unique subjects (Yin, 2018). In this study, the case was two individual teachers (i.e., people) in two different universities in Indonesia who have different background contexts.

The participants were selected purposively considering their teacher's and institution's status. One teacher, Arnia, was a civil-servant teacher at a public university. The other teacher, Rinda, was a permanent teacher at a private university. The names of participants in this study used pseudonyms. Both participants were females and had English Language Teaching academic backgrounds. Arnia had 8 years teaching experience, and Rinda had 7 years teaching experience. In teaching language skills, Arnia taught speaking and listening, meanwhile, Rinda taught writing. This study decided the participants from different university status as public and private universities may have different policy or programs as an impact of different privileges from government supports.

In collecting the data, interviews were carried out in an English language instruction and was online using a WhatsApp video conference. The interview questions were semi-structured to enable me explored profound information to obtain more comprehensive data. There were eleven main interview questions consisting of:

1. How long have you been teaching at your university?
2. What subject do you teach (language skills?)
3. What technology do you normally use for teaching?
4. How did you know about these technologies? (conference/ seminar/ colleagues/ academic journal, YouTube, etc.?
5. Tell me how you normally use technology to support your teaching
6. How often does your institution give you training or CPD?
7. If yes, what is the training about?
8. If yes, does the training focus on TPACK?
9. Do you get training from governments? Is the training focusing on TPACK?
10. How often do you attend conferences, seminars, or workshops focusing on technology?
11. Do your colleagues influence the way you use technology? Tell me more about it.

The questions were made according to literature discussing CPD such as types of CPD widely had by teachers particularly related to ICT uptake in teaching (e.g., Alivi, 2022). The result of interviews was analysed using a thematic analysis by classifying participants' views on similar topics.

RESULTS

The findings presented three main themes in accordance with the data from the interview, covering teachers' use of technology in teaching, teachers' formal ICT CPD, teachers' informal ICT CPD. The detailed description on each theme is explained as follows.

Teachers' use of technology in teaching

Both teachers used a variety of technology on a regular basis to support their teaching such as LCD projectors, *Canva, Padlet, YouTube* and social media. Their decision on using certain types of technology is based on its potential to use for different teaching activities and needs in the subject materials. For example, Arni said that she used technology to support teaching delivery, access to resources, collect students' opinions, and facilitate students with online projects or assignments. Arni explained that:

> *The decision to use tech in my class is based on the nature of learning materials. I use varies tech tools as long as I need them to support my teaching. I use slides and LCD to teach materials for almost all of my class. I use Spinner to assign the students for speaking class. I use Mentimeter to do small survey. I use Google Form or Google Classroom to submit assignments. I use Padlet to show my students' opinions. I use social media post for learning example (authenticity) or to use social media to post my students' work.* (Arni)

Similarly, Rinda used a variety of technology types to support teaching presentations and students' projects. She also used it for giving students' ice breaking to improve students' active engagement. She liked to use technology for students' projects to encourage students' creativity. She said:

I use AI to correct students' writing. It's very helpful and saves time. In other hand, I use some applications for example Quizzes and Padlet. I usually use them for warming-up or ice breaking activity. It's effective for activating students' participation. For delivering materials, I use PPT and Canva. I also attached my ppt and link Canva on E-learning. This is used to facilitate students to learn the material again. For students' project, I use Canva and Bookcreator. It encourages my students' creativity and engagement. They really enjoy and enthusiast because they think it's new experience for them. (Rinda)

Teachers' formal ICT CPD

Both participants said that they occasionally had formal CPD from both institutions and governments. They told me that they had the formal CPD such as training from the institutions around twice a year. However, they said that the training did not focus on TPACK but more on strengthening administrative knowledge or awareness. For instance, Rinda said that the training was about guidance to enhance teachers' awareness on the use of e-learning for online and hybrid learning in the institution, how to write journal article in accredited international journal publication, and how to use AI for writing journal articles (e.g., paraphrasing, navigating literature, checking grammar and plagiarism). Rinda added that her institution held training about optimizing the use of E-learning in teaching, but she felt the training material was more technical instead of meeting the TPACK concept, such as creating quiz, attaching material, making forum, and other available menu in e-learning. Likewise, Arni said:

To be honest again, my institution rarely gives us or provides us with certain training for tech in teaching. If I can count it maybe just twice or three times a year. However, the topics are not really touching the ground of teaching, or they are more technical. The topics of training were mostly about international journal, Scopus, new systems from governments (like Sister, Sinta, etc) or the latest was about AI and chat GPT. (Arni)

In terms of formal CPD from the government, Arni and Rinda had slightly different experiences. For Arni, she did not get regular training from governments, but they provided online-based training which teachers could access to the designed websites by registration. However, she said that the topics of training did not focus on TPACK development.

So far, as I remember, the training is on the web like dikbud hr. It is related to civil servant ethics and sexual harassments. For TPACK, I think I never had. But, maybe, it is just me who never get into the news or information. Lately, I have known that we can register via website to have free courses on things like that. (Arni)

Despite having similar views on occasional formal CPD from governments, she still had some training from governments. She said that some of the materials were about technology, such as optimizing the use of technology for teaching and technology used of teaching media. She explained:

The training was held by Dirjen GTK Kemendikbud (Ministry of Education). The training focuses on the implementation of independent curriculum and how optimizing technology for teaching and learning activities. Another training I participated was held by LLDIKTI in collaboration with some selected universities, Pekerti (technical and instructional training in teaching) and applied approach training. The training focused on teaching preparation, method, curriculum, and technology used for teaching media. (Rinda)

Beyond formal CPD from institutions and governments, both Rinda and Arni said that they liked to join seminars or conferences at least twice a year. They told me that they sometimes got to know about new technology that was potential to us use in teaching and learnt how to

integrate it into their teaching activities from joining these academic events. For example, Arni said that she joined an online seminar conducted by Access (RELO U.S. Embassy), and she learnt much about how to use some technology such as *Canva* and *Google Slide,* and how to render photos into motion pictures.

Teachers' informal ICT CPD

Both teachers said that they learned or knew new technology more from informal ICT CPD such as learning from colleagues or students and independent learning from You Tube, social media, or Google. Arni said:

> *To be honest, I learn new tech from seminar and friends. Somehow, I also learn from my students and they are happy to teach me. I learn those things for ads in the internet. I learn by myself by watching youtube tutorials. When I joined teaching training from Access (RELO U.S. Embassy), I learn much about tech. I learned how to use google slide and render photoes into motion pictures. Sometimes, I also search google to find supporting materials, like pictures or texts or videos to be analyzed.* (Arni)

In particular, both Arni and Rinda felt that their colleagues contributed to their decision to the use of technology in teaching. Rinda told me that her colleagues liked to introduce her to a prospective technology and encourage her to use it to facilitate students' learning. Furthermore. Arni said that she was always encouraged to improve their pedagogical skills, and when she found out her colleagues had successful teaching experiences, she always wanted to learn from them. She particularly said:

> *I like challenges and I dont want to be left behind. I want to make my students easier in learning, and it is parts of my job. I try my best to include theories of ELT by using selected materials and tech. Somehow, I feel like too ambitious when I know that my colleagues teach like in an oldfashioned way. I think that I am too much in thinking of my teaching. But, when I know that my colleagues have something new, I feel so interested. I ask and find more about it and learn by myself via YouTube. When I know they can use good tech, I feel so excited because I dont want to miss it. After I learn, I use it in the class. I also evaluate how it works, so I can have a set of rules in using it for later. But, if it is too complicated, I will not keep it in class, but I can still use it for another chance.* (Arni)

DISCUSSION

There are three main points to discuss related to the findings covering decision rationales of the ICT use; the impact of informal CPD to their ICT uptake, and the influence of formal CPD to their decision of ICT use in teaching.

Teachers' rationales of the ICT use

The findings show that teachers' decision on the use of certain technology was based on its compatibility to support certain teaching activities and materials. For instance, Arni said that she used Spinner to support teaching speaking skills, and Rinda used AI to support her teaching writing for plagiarism check. This was in line with Alivi (2022) that one technology may not be applicable to use in teaching all materials or subjects. In English language learning context, referring to Arni explanation, she liked to use *Padlet* or *Mentimeter* to collect student opinions, in which these technologies may be applicable to teach speaking or writing, but listening skills.

The impact of informal CPD to their ICT uptake

Another important point to discuss is the informal CPD such as the role of colleagues and students in the teachers' ICT uptake. Both Arni and Rinda said that they were encouraged to learn new technology and use it in teaching due to following their colleague's successful use in teaching. Some studies such Alivi (2022), Gamlo (2014), Kumar and Daniel (2016), and Oakley and Pegrum (2015) also indicated the role of colleagues in influencing teachers' positive attitudes toward ICT use in teaching. Furthermore, a teacher, Arni, also explained that she was encouraged to use technology due to students' use of technology in their daily life, and she was not reluctant to learn from them. This corresponds to Alivi (2022) and Guo et al. (2008) that recent students were categorized as students' natives, who they were familiar with technology, and it became part of their lifestyle. Their familiarity and reliance on the use of ICT in their daily life led to their need in education practice, thus, encouraging teachers and policy makers to involve ICT in educational development programs (Alivi, 2022).

The impact of formal CPD to their ICT uptake

According to the findings, it indicated that teachers improved their TPACK from the informal CPD more than the formal CPD. From the interviews, it was shown that the formal CPD the teachers got from the governments or institutions were limited, and the materials still less focused on TPACK models. If they included technology in the materials, it was still limited to technical operation. Meanwhile, the opportunities to access informal ICT CPD were widely open and flexible in terms of time and needs. Their decision to have self-directed learning from informal ICT CPD may be affected due to their strong belief in ICT and pedagogy about their contribution to teaching success (Alivi, 2022; Oakley and Pegrum, 2015). Alivi (2022) indicated that teachers with innovative adoption were creative and regular in the use of technology in teaching. They were not easily influenced by the absence of ICT resources and training from institutions and governments levels. They had strong beliefs in contribution to teaching success and students' learning, and they were more student-centered in teaching practice.

CONCLUSION

To conclude, English language teachers should not be dependent on the formal CPD programs from governments or institutions to develop their teaching performance and TPACK. CPD is not limited to formal training, but beyond it such as collaboration and sharing with colleagues and students, attending free online seminars, or learning from online resources or social media which could give teachers more flexible time and fit the preference. CPD is a long-term process and continuous to enable it change teachers' belief and performance, so teachers should keep put higher concern and awareness on enhancing their teaching performance on TPACK to suit and adjust the students' need in the digital era.

Theoretically, this study is expected to contribute to knowledge development in the literature, particularly on the discussion of professional development in English language teaching, and the important of the TPACK framework as the focus on the professional development programs and pedagogical practices. In addition, this study is also expected to

give practical contributions to different educational stakeholders such as teachers, institutional leaders, and governments (as policy makers). For teachers, they are expected to enhance their teaching performance from any CPD types which are easier to access for them. For policy makers, both institutional leaders and governments in Indonesia, the result of this study is expected to be one of the insights to comprehend teachers' perspectives on the CPD programs, thus, could be used as consideration to redesign curriculum and education programs based on the recent need in the digital era.

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