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# Teacher Experience to Employ Technological Pedagogical Knowledge in Teaching English: An Autobiographical Narrative

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**ABSTRACT**

Previous studies have discussed TPACK's constructions in the last decade, which focus on teacher professional development, survey TPACK's (Technology, Pedagogy, and Content Knowledge) enactment, experimental, and teacher TPACK's profile. A few studies are focused on the subdomains of TPACK, TPK (Technological Pedagogical Knowledge), which discusses how teachers' experiences practice TPK. It has become a new scope of exploration in Indonesia. The present study aims to narrate my meaningful story by employing technological and pedagogical in teaching English to Vocational High Schools. It will focus on how I practice TPK as a novice teacher in Indonesia's private Vocational High School. The data was collected through my teaching diary and supported with students' artifacts. This research is grounded in an autobiographical narrative, which explores the meaningful story of the narrator. The finding of this study reveals that the researcher, as a novice teacher, can employ TPK in teaching English by joining professional teacher development and self-awareness to make innovations in using technology and provide different learning activities using technologies. The present study might bring future research contributions for preparing TPK, reflecting TPK, and evaluating TPK in teaching English for Foreign Language (EFL).



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## 1. INTRODUCTION

Technology develops, affecting human daily routines in many areas of work. In the education sector, technology has transformed the way teachers deliver content and utilize pedagogical knowledge, making lessons more interactive and accessible. In the Indonesian context, technology facilitated the implementation of online learning during the COVID-19 pandemic, ensuring the continuity of education despite physical distancing measures. Some studies emphasized the role of technology in education (Koehler & Mishra, 2005; Koh et al., 2017), highlighting its potential to enhance learning outcomes and foster innovative teaching practices. Furthermore, the integration of digital tools has

proven essential in adapting to rapidly changing educational environments, preparing students for a tech-savvy future.

TPACK combines technological, pedagogical, and content knowledge (Chai et al., 2011; Koehler & Mishra, 2005; Schmidt et al., 2009). Whether TPACK constructs exist in practice, as proposed by Mishra and Koehler (2006), needs to be further clarified. The components constructed three intersections as follows: (a) Technological Content Knowledge (TCK), (b) Technological Pedagogical Knowledge (TPK), and (c) Pedagogical Content Knowledge (PCK) (Shulman, 1986). These three intersections capture the different types of teachers' professional expertise needed for effective technology integration. TPACK is a term used increasingly to describe what teachers need to know to effectively integrate technology into their teaching practices (Chai et al., 2011). Besides, a few studies in Indonesia focus on a novice teacher who explores practicing one of TPACK intersections, such as TPK.

Previous studies have investigated TPACK surveys in professional teacher development programs focusing on planning instruction on content-based and implemented technology (Harris & Hofer, 2011; Koh et al., 2017). In addition, Koh et al. (2017) and Schimdt et al. (2009) developed TPACK-21CL with design rubrics, evaluate the teacher and student outcomes and measure pre-service and in-service teachers' (PST and IST) practice and assess their Technological Pedagogical Content Knowledge (TPACK), included TPK as the intersection of TPACK. Chai et al. (2011) examined TPACK survey results after pre-service teachers enrolled in TPACK courses. The participants were from 834 PST in Singapore. The findings reveal that pre-service teachers' understanding of TCK could be enriched with sessions devoted to technology-related subjects. PST could present their second teaching subject using appropriate technology. Schmidt et al. (2009) conducted a survey study of TPACK for in-service teachers and lecturers with different background studies such as science, math, and English.

Moreover, Benson and Ward (2013) conducted TPACK and focused on professional TPACK profiles that reflected on their teaching practice at the university level. The participants were professors whose experience with teaching online experience 3 years. The data were collected during 16 weeks. The finding captured that high teacher's technological knowledge did not guarantee teachers' TPCK. The teacher who used smallest technology could demonstrate supreme TPCK development because she could determine appropriate pedagogy during teaching session. Other significant research, Baier and Kunter (2020) stated that TPACK framework received excessive considerations, despite a lack of knowledge developed assessment of TPK. The research explored assessment evaluating the usefulness of teacher education courses integrated with technology. Furthermore, the test could be used to measure the effect of a teachers' TPK outcome variable. In conclusion, TPK tests can be used to help pre-service teachers do self-reflection related to technology for teaching. Based on previous studies above, the research gaps lie in different focus and context from the previous studies. In the present study, I focused on the practical reflection of the teacher's Technology Pedagogy Knowledge (TPK). The reflection involved my meaningful experience teaching English and implementing TPK at the Vocational high school level. Therefore, it might make a practical contribution to the scope of English education.

Furthermore, previous studies focus on practical studies of TPACK in English subjects (Abu-Hardan et al., 2019; Drajati et al., 2018). Drajati et al. (2018) explored TPACK Multimodal Literacy for pre-service and in-service English teachers. This research involved the technologies used in implementing the learning and the problem. Other studies by Abu-Hardan, Al-Jamal, and Sa'Di (2019) explored the effect of the TPACK framework as a treatment for the experimental group in teaching reading comprehension. The result shows that TPACK framework enhanced the student's reading scores for experimental group. Other research, Schmidt et al. (2009) investigated TPACK factor analysis in pre-service teachers. The studies explored survey studies for all the components of TPACK. It involved one of TPACK intersections, Technological Pedagogical Knowledge (TPK), which I chose as the construct theory in the present study and the survey instruments which were tested were reliable. Based on previous studies, revealed that technology pedagogy knowledge could mediate teaching and learning English for pre-service and in-service teachers implementing the TPACK framework.

There have been studies discussed TPACK explored surveys studies in teacher development and pre-service English teacher perspective teaching using TPACK (Drajati et al., 2018; Drajati et al., 2021; Harris & Hofer, 2011; Koh et al., 2017; Tseng et al., 2019) and teachers TPACK's profiles Benson and Ward (2013). In response to research studies, this paper also addresses a practical gap in practicing TPK for in-service teachers. There needs to be more understanding about TPK practice in teaching English for Vocational High School. The novelty lies in the methodology and practical gap in this study. Few studies have discussed using an autobiography, which reflects an English teacher's experience with her TPK knowledge. I positioned myself as a teacher and researcher who constructed, taught, and reflected on my teaching experience. The present study focuses on various technologies implemented and constructed different learning activities in teaching English for Foreign Language (EFL) in private vocational high schools in Indonesia. Therefore, I intend to complete the gaps in this theme's methodological and practical aspects. The research question of the present study seeks to know how I used various technologies for different learning activities. I implemented technological and pedagogical in the context of teaching English for Vocational High School.

## 2. METHODS

This study was grounded on a qualitative approach ensuing an autobiographical narrative study. Researchers employ qualitative research to construct reality from experience and make sense of the world (Merriam, 1998). Qualitative research has two categories in its studies: understanding the natural setting of human beings and the meaningful perspective (Richards, p. 10, 2003). In the same vein as qualitative research, an autobiographical narrative is one of the branches of narrative inquiry. Benson (2004), Barkhuizen (1989), and Riessmen (1993) state that storytelling is used throughout life by people of every background for a variety of purposes. Narrative inquiry is paradigmatic and narrative. Both entrenched elder and deeper in everyday thinking, telling an experience story is a "universal human activity" (Riessman, 1993, p. 3), and human experience is primarily constituted by meaning (Polkinghorne, 1988, p. 1; Barkhuizen et al., 2014: 1).

In the present study, the researcher investigated her experience as a teacher who taught English in Vocational High School. The researcher positioned herself as a teacher and researcher. I proposed to reflect on my experience practicing TPK. The research focuses on how I employ various technologies and construct different learning activities through technologies. An autobiographical narrative assisted me in acquiring reflection when I taught English. Indeed, I employed TPK during teaching activities.

To strengthen the data, I completed the data with a teaching diary and video teaching. Before collecting the data, I asked permission from the headmaster's school and students to record teaching sessions. I constructed the teacher's reflection and noted the critical accident in the teaching session. The researcher analyzed the data using a thematic analysis coding method that included six analysis phases (Braun & Clarke, 2006), as follows: (1) familiarizing the data, (2) generating initial codes, (3)reviewing themes, (4) defining and naming theme, (5) producing reports, (6)analysis of the selected extracts

## 3. FINDINGS AND DISCUSSION

This study presents the researcher's experience using TPK to teach English at a private vocational high school. Based on my teacher's diary data, three themes appear in the discussion, as shown below:

### *3.1. Findings*

#### 3.1.1 Various Technologies that Captured in my Practice

**Table 1.** The description of what is contained in the findings related to how I implement TPK and what challenges emerged when I taught English in a Vocational High School

| Technology | Implementation | Challenged |
|---|---|---|
| Book Creator | Students read the reading passage; they discussed it in small group. They predicted the main idea and supporting idea. | Students were challenged to understand long paragraphs, and the materials had English-specific purposes. |
| | Students learned vocabulary list dealing with daily routine. | |
| | Students learned simple present tense using Book Creator. They created simple present tense into (negative, positive, and interrogative) | Some students did not understand the form of the present tense. |
| YouTube | I created video learning and searched supporting video | Students should be stimulated by watching learning video before the class. However, some students ignored my instructions |
| Ms Teams | Online learning: synchronous and asynchronous learning<br>Offline learning: uploading materials and submitting tasks | online learning: Technical problem (internet connection, trouble in LMS, and understanding Ms Teams tools)<br>non-technical problems: less active<br>During offline learning: we used less LMS (direct communication) |
| Google form | Assessing students' cognitive knowledge for formative and summative tests. | No Technical problem, however the questions were less HOT and creative |
| Quizziz | Students felt motivated | Quizziz was suitable for motivating students rather than for giving HOTS questions. |
| Instagram | Students presented their work (writing about their experiences in daily routine) on Instagram. Then, I gave feedback on it. | Some groups did not upload their work caused by unfinished work. Students also did not give peer feedback. |

I am a novice teacher who was 27 years old at that time. I used technology in daily life. When I started my teaching experience during the pandemic time, my school cultivated to apply technologies

by conducting workshops on technological implementation during online learning. In addition, I also enrolled in a teacher professional development workshop online. Both workshops assisted me a lot in acquiring knowledge dealing with appropriate technologies in English language teaching.

> *(Excerpt 1 Teacher's Diary: Use Various Technologies).*
> *I could use various technology to enhance my pedagogy skills in teaching English. I applied technologies such as YouTube, Book Creator, LMS (Microsoft Teams), and assessments using Google Forms, quizzes, and presenting their collaborative writing through Instagram. I used YouTube to build students' previous knowledge and constructed my learning video.*
> *For Learning Management System (LMS), I used Microsoft Teams. Ms Teams is used during online learning and offline learning. To assess students' knowledge, I used Google Forms and quizzes. Google form is appropriate to measure HOTs or formal tests. In comparison, quizziz encourages and motivates students to do educational games quizzes.*

### 3.1.2 How I Employ Technology in Varied Learning Activities

I applied to *Book Creator*, which is an e-book PDF builder. Firstly, I learned about this website e-book builder in a workshop conducted by my school or teaching community practice. I listened to the speakers' explanations. It was obvious to me. Then, I attempted to construct my teaching materials. Before I used book creator, I had experience using other e-book builders. Therefore, it is not a big issue for me to use that application. Nevertheless, the challenge was in constructing content materials.

I should create my content and design, then collect and compile at *Book Creator*. The book creator consisted of reading passages whose topic was related to the student's background knowledge. I compiled the materials and suitable links in *Book Creator*. We discussed daily routine topics (KD 3.12 & 4.12). I compiled vocabulary lists with pictures and how to pronounce them. The students learned new vocabulary in the reading passage dealing with daily routine. I asked students to open Oxford Dictionary and Google Translate to learn the meaning of the vocabulary. They learned new vocabulary related to pharmaceuticals. In addition, students learn the grammatical structure of the present tense. I put form and examples of the present tense in sentences; then, we attempted to find the present tense consisting of reading passages. I asked students to write and change the sentence into negative, positive, and interrogative on the writing board. They could do it well. Students understood present tense materials. Students discussed reading comprehension passages using book creator. They collaborated to find the main idea and supporting idea of the passage. The contents were the daily routines of pharmacist students. It relates to the student's experience. My students had some difficulty on miss understanding the meaning. They discussed in small groups, and some led the discussion to clarify it.

> *(Excerpt 2 Teacher's Diary: Teacher's Technological Knowledge)*
>
> *In using it, students are asked to use the book creator when discussing the reading text provided by the teacher. Students can also listen to the teacher's audio, reciting vocabulary and explaining the simple present tense. Book creator helps students understand the compilation of material that the teacher will deliver more interactively and flexibly.*

Before starting an English learning session, I generally searched for videos connected with the learning session or created my video explanation and uploaded it on YouTube. I hope students can open the video before joining the class. It will help them understand what will be learned in the class and know the background knowledge. I struggled to make my video. I designed the PPT using *Canva* and *PowerPoint*. Then, I recorded my laptop screen and my voice explaining the materials. I uploaded it to my YouTube channel. In the learning session, I reviewed what they watched in the video and highlighted important points. Besides, I searched for videos that encouraged students to learn the materials. I asked students to discuss the topic with their peers dealing with the video. In practice,

YouTube is used to learn pronunciation when I choose a native speaker to present the content. Students got confused about how to understand a native speaker.

*(Excerpt 3 Teacher's Diary: Teacher's Technological Pedagogy Knowledge)*

*I also makes learning videos, which will be uploaded to the teacher's YouTube account. The video contains the teacher explaining the English material PowerPoint slides according to the Kompetensi Dasar (KD) that will be studied. Students are very helpful in understanding the material presented by the teacher.*

During online learning due to COVID-19, my school used *Microsoft Teams (Ms Teams)* as a learning management system (LMS). Before using that LMS, the school conducted a workshop for teachers to apply the features of LMS well. I could use Microsoft Teams. I could conduct synchronous and asynchronous learning well. During offline learning, the interaction and discussion were conducted directly. I shared the materials and asked the students to submit their work at *Ms Teams*. I prefer giving students direct or written feedback while working on the task.

To assess the students' cognitive knowledge through the formative tests, I used *Google Forms* and *Quizziz*. Both applications were learned from school workshops. My school conducted tests or interactive education games using those applications during online and limited face-to-face learning. I gave them quiz after finishing essential competency learning or during the learning session. *Google Forms* are also commonly used in my school's formal tests (summative tests of the semester). I gave students multiple-choice questions consisting of 5 options. *Google Forms* can help a teacher facilitate HOTS questions. The common English skills tested using *Google Forms* are reading and grammar. The students used their phones to do their tests, which impacted the quality of the pictures. The bad case of technical problem using *Google Forms* was the internet connection. Due to limited WiFi connection, the worst technical thing was that they could lose their answers. In pedagogy, *Google Forms* did not work on a creative cognitive assessment because the students could not join divergent knowledge activities.

The other website quiz was *Quizziz.* This application was used for interactive tests, wrapped as games. I created the questions dealing with the daily routine. The students were interested in taking that quiz. They were motivated to get a perfect score. Indeed, they played several times. It is easy for me to construct my quiz. I constructed a reading passage and then made comprehension questions from it. I gave one minute to answer one question. If the students can answer the questions, they will get stars and points. It included a rank order of the highest to the lowest score. Therefore, students are motivated to repeat the games.

*(Excerpt 4 Teacher's Diary: Use Various Technology)*
*I gave temporal seconds in every number to do the quiz. Sometimes, students need more time to do the questions. The students felt challenged in doing the quiz. Some of them repeat the questions to get perfect answers.*

**3.1.3 Teacher's Awareness**

In implementing TPK practice as a novice teacher, I am required to learn TPK by joining teacher professional development. For instance, *Book Creator* is a PDF builder, which is new to me. I watched the instructor's explanation about how to make an eBook. Then, I practiced it and constructed an eBook dealing with my materials. It is easy for me to use eBooks. I did not have any technical problems; however, that was the first time the students had experienced using *Book Creator*. I need to guide and solve their problem The only problem is the content. I should make it interesting, substantive, and informative. Other technologies, such as *YouTube, Google Forms*, and *Quizzes*, I joined the school's workshops to implement various technologies in the classroom. Those various technologies assisted me in directing effective and efficient learning. The learning activities through technologies were various: observation, discussion, and assessment.

In the practical implementation of the technological tools, another technical problem came from my students. Sometimes, they had technical problems in entering *Microsoft Teams* and did *quiz* in *Quizzes*. Moreover, the students sometimes need help with their internet connection. Therefore, I needed to turn on my internet hotspot portable.

*(Excerpt 5 Teacher's Diary: Teacher's Awareness)*
*I am a novice teacher; I needed to join teachers' professional development. I needed more than my bachelor's degree knowledge to teach professionally. I needed to learn more. The school where I teach actively provides teachers with professional development workshops in technology and pedagogy. Moreover, I am motivated to participate in workshops or teacher professional development (TPD) held by the community, such as using book creators. I apply it in my learning in class, and it is quite helpful in presenting material along with visual aids and the teacher's instructions.*

On the other technological competence, I could make and upload my videos on YouTube. The video that was uploaded was the presentation of the materials. It was simple to make a video, but I needed design skills using technology tools such as *PowerPoint, Canva*, and *Filmora* (editing video graphics). In addition, *YouTube* was used to build students' background knowledge. I should choose motivated and stimulating videos to construct students' knowledge. It helped them understand the topic. I challenged myself to find appropriate technologies to help me teach my students. I actively participated in the teachers' professional development and implemented the knowledge in my English class.

*(Excerpt 6 Teacher's Diary: Teacher's Awareness)*
*I actively join teachers' professional development in the virtual academic community or the school's workshop. I am interested in how to use technology to assist me in teaching English.*

**3.1.4 Teacher's Technology Pedagogical Knowledge**

In my practice, I encouraged students to know the background knowledge of the study. Therefore, I asked them to watch a video on *YouTube*. They observed what was happening in the video. The discussion is related to the learning materials. It discussed the daily routine of pharmacist students. Based on students' experience, it is also close to their experience as pharmacist students. The method I teach my students is discussion. Meanwhile, the students felt challenged in watching *YouTube* videos who speaker is a native speaker. They still digested how the speaker pronounced each vocabulary.

*(Excerpt 7 Teacher's diary: Teacher's TPK)*
*I could utilize YouTube in different learning activities. Why do we need to watch YouTube videos? I used YouTube videos with the source "pharmacy," which related to the students' needs so that students could get good English input.*
*This is a new challenge for vocational high students. I encouraged them to watch videos in English more often and repeat them to absorb the information learned in the video. Students can also listen to the pronunciation of the video.*

After observing the YouTube video and reading the *Clinical Pharmacy* passage through the book creator tool, Students discussed the reading passage in small group discussions. They were asked to understand the text, find the main idea, and support it. I found that students had some difficulties understanding the content's vocabulary. They were permitted to open *Google Translate* and *Oxford* Online Dictionary. The students learned new vocabulary related to the pharmacist's job and experience. Next, I directed the discussion by questioning students, "What is the main idea of paragraph 3? What is the supporting idea of paragraph 1?". The students could answer it. However, the answer was still textual. They just reread the main idea and supporting idea again. They have not been capable of making their sentence. For the final assessment, I asked students to do collaborative writing on their

experience becoming pharmacy students. Students must work collaboratively to write and reflect on their experiences. I gave them an example before; we discussed the main activities in the daily routine of pharmacy students. The students were familiar with the activities. I asked them to list their daily routine. After finishing to make the list, I asked them to write their paragraph. They wrote their book and then designed it *in Canva*.

*(Excerpt 8 Teacher's diary: Teacher' TPK)*
*I directed the big discussion after they finished small group discussion "What the pharmacist a pharmacist do at 10 pm?"*
*(Students answered so slowly)*
*"The pharmacist checked drugs supplies …. " (The students answered infer from the reading text")*
*(Excerpt 9 Teacher's diary: Teacher' TPK)*
*They worked to make the brainstorming their reflection. Then, they constructed their own experience to become pharmacy students. Their discussion was about their activities, class of words, pronouns, English meaning, and grammatical structure.*

I directed students to share and give peer feedback through Instagram. However, in reality, only the teacher gave them feedback. Even some of the students were not ready yet to complete the task. When I asked them to perform in the class, peer feedback also did not work. They just gave a clap to their friends. In addition, the students felt challenged to learn knowledge using the technology. They learned new vocabulary and constructed writing experiences through the technology. I found active and inactive groups. The active group understood more of the vocabulary listed in the reading text and was more willing to learn new vocabulary.

### *3.2. Discussion*

The present study focuses on exploring my experience with how I use technologies and how to use technologies in different learning activities while teaching English at a private vocational high school. In this research, I highlighted the TPACK, Technology Pedagogy Knowledge (TPK) subdomain as my construct theory. The data collection (my teacher's diary) was collected by (Barkhuizen et al., 2014) and analyzed the data using thematic code by (Braun & Clarke, 2006). The results indicate that I could use various technologies whenever I taught in different learning activities. I learned multiple technologies from community and school teacher professional development. It has motivated me to be aware of using technology, which facilitates learning.

I could conduct different learning activities using technologies, although some students still had difficulties being active in group discussion. Other challenges were how I chose appropriate technology and appropriate learning activities. The present study aligns with the previous research by Drajati et al. (2021). The researchers explored how English pre-service teachers used varied technologies during learning activities. The average score for using technological tools in their lesson plan is 2.6, meaning almost 50 percent of English pre-service teachers used technological tools to facilitate learning. Moreover, technical challenges of the present study are coherent with the previous research by Tseng et al. (2018). The technical problems encountered likely dealt with internet connection when the teacher taught students through web-conferencing. The video conference meeting sometimes has unstable sound quality, which lags in the web-conference forum.

Besides, my TPK skills are moderate. However, I could integrate my technological ability into teaching activities. I stimulated the students to explore their knowledge of technology. The corresponding result of the TPACK survey's study on teachers' English for Specific Purpose (ESP) by (Mulyadi et al., 2020) revealed that most teachers got 89%, meaning ESP teachers could solve problems using technological tools, 77% of ESP teacher adapted using technology, and 76% crafted assessment. In my result study, choosing appropriate assessments in creative and different learning activities was difficult. The students' readiness was still doubted to contribute to the assessment participated actively in the student-learning center. Another research by Baier and Kunter (2020) explored the validation test for TPK and obtained a positive relation between TPK test and self-reported technology knowledge. In

addition, it discovered pre-service teachers who were high-rated TK outperformed lower TK. Therefore, technological competence had a crucial role for TPK.

Furthermore, my technological competencies were formed by joining teacher's professional development. It aligns with the previous research on TPACK teacher professional development (Drajati et al., 2018; Drajati et al., 2021; Ersanlı, 2016; Tseng et al., 2019). The previous studies investigated TPACK development for pre-service and in-service teachers based on the teachers' competence. The finding discovered a positive result that shows in professional development. Koh, Chai, and Lim (2016) teachers increased their self-confidence in developing lesson design. The pre-service and in-service teacher will join the teacher's development course dealing with TPACK. Besides, Tseng et al. (2019) organized the pre-service teachers to go through multiple cycles of action and reflections, specifically initial design, implementation, reflection on practices, and redesign. The study revealed that the teachers improved on this problem by (a) developing a relationship with students via chatting, (b) reviewing content via games, and (c) marking content via whiteboard tools. An implication derived from this finding was that teacher educators could help distance teachers enact TPK through examples of using online technology in an appropriate pedagogical manner. Another research by Drajati et al. (2021) captured how English pre-service teachers actively use technologies during learning. The result portrayed that they obtained an average score of 2.6. Consequently, they could construct learning activities using technologies in their teaching practicum. Given the above information, it is reasonable to conclude that teacher professional development assists me as a novice teacher who was starting teaching experience in two years.

In the same vein, the previous studies confirmed that pedagogical knowledge is the other challenge of pre-service and in-service teachers. They still lack pedagogy skills (Benson, 2013; Tseng et al., 2018). Other research challenges by Mulyadi et al., (2020) lie in the subdomain of TPACK, a teacher's PCK skills. English for the non-English department teachers (ENP) teachers must improve their pedagogical content knowledge (PCK). This suggests they enhance their ability to choose appropriate learning sources, recognize linguistic problems, and provide appropriate feedback on learners' language aspects. The other difficulties of integrating pedagogy using technology are also found by (Mouza Karchmer-Klein, 2013). Teachers still lack knowledge of how to enact technology and pedagogy, while higher teachers', could explore deep knowledge using technology. Other research by Tseng et al. (2019) stated the limited enaction on teachers' PCK towards their TPK skills. The teachers' PCK skills were not connected with TPK skills. Moreover, Baier and Kunter (2020) conducted a study on TPK test for pre-service teachers. The researchers sought to employ validation in evaluating teacher education courses on technology, aiming to identify effective and appropriate instructional designs for Technological Pedagogical Knowledge (TPK). Furthermore, the test could measure the effect of a teacher's TPK outcome variable. In conclusion, TPK tests were used to help pre-service teachers self-reflect on technology for teaching. Based on the previous research, showed the crucial component of TPK on the TPACK framework. I reflected on the current study, recognizing that I could integrate technological and pedagogical knowledge. However, I found it challenging to apply assessment methods to students' outcomes effectively.

My experience as a novice teacher and researcher limits the generalizability of the result. I captured my meaningful story about employing TPK in teaching English at a Vocational High School. Indeed, this experience could not be generalized to other novice teachers or researchers. In addition, I recorded teaching videos and reflected on my experience in practicing my teaching. Moreover, the methodological choice was constrained by my position as a teacher and researcher. I used naturalistic research. My experience in the past time was the natural setting of my research field. Besides, I felt challenged in constructing materials, teaching as a teacher, and writing as a researcher. I might need to include other critical incidents in my previous lesson because I collected the data based on the video recording and teaching diary. The limited scope of TPK can draw the other theoretical limitations of TPACK's subdomains. Integrating pedagogy using technology for a novice teacher becomes an enormous challenge, and constructing it requires more effort. Another emerging challenge is crafting content that relates to the student's needs as pharmacy students. The content knowledge (CK)

component in TPACK emerged in my research. I made more effort to create content materials related to English for Pharmacy.

Further research can lead directly to the limitations of methodology. Future researchers could use narrative inquiry or case study because it could capture experiences or phenomena with other people as participants. As this study only captured my practical experience based on teaching video recording and teaching diary. Future research might be needed to examine or explore longitudinal research across different English-level studies. Conversely, as content emerges in this research's limitation, the subsequent research might better explore the framework of TPACK implemented in English as a Foreign Language.

## 4. CONCLUSION

The present study set out to explore how I used various technology and used technologies in different learning activities. This study has reflected my experience implementing TPK in my teaching experience. The challenges were how I chose appropriate technology and appropriate learning activities reflected on my TPK skills in choosing different learning activities using technological tools. First, I constructed students' background knowledge using *YouTube* and *Book Creator*. Second, I constructed the discussion session, it was to explore students' knowledge. Third, students joined collaborative work and presented their work on Instagram. Fourth, I constructed different assessment forms using *Google Forms*, *Quizziz*, and writing projects for collaborative work. The research contributes to the practical study of how English in-service teachers practice TPK in Vocational High Schools. In addition, the present study fills the methodological gap, which explores my reflective experience through an autobiographical narrative method in framing the theoretical TPK. The present study has several limitations. Firstly, the methodological choices were constrained by minimum perspective experience from a teacher. Second, the present study used post-positivism, which reflects in-service teacher's experience. Therefore, we could not generalize the finding. Thirdly, this study was restricted to TPK theory as the intersection of the TPACK framework. Further studies are crucial to explore critical incidents in a teaching session, focusing on the students and the teacher's perspective in implementing TPK, specifically in English Vocational High Schools. Besides, developing teachers' TPK knowledge requires collaboration with the government to facilitate teachers' professional development, school to encourage teachers, and teachers to practice and reflect teaching and learning process.

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