Developing EFL Teachers' Skills in Creating Digital Photo Story Videos as Learning Media

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Abstract: Along with the increase in the use of digital materials, teachers need to possess skills in creating these materials. Digital photo story videos are among the alternatives to digital materials that are easy to create. However, some teachers still had limited technological skills. A workshop was conducted online for three months from August to November 2020. This workshop trained some participants in creating digital photo story videos as learning media. The participants consisted of twelve secondary school teachers of English from different districts in East Kalimantan. Data were gathered from discussions, reflections and outcomes of the workshop. The results revealed some indicators of teachers' development, not only in teachers' technological skills but also in some other domains. The participants gained new knowledge regarding simple technology for creating videos, and their understanding of the TPACK framework was also detected. They were able to operate the software applications introduced, and created the digital story videos successfully, despite a few technical problems. In addition, they showed their initiative to explore new applications to upgrade their videos, and intention to learn more about video editing. Effectively, their attitude towards the workshop and their videos was positive, and socially, they confirmed that their networking expanded as they met and worked together with colleagues from different districts. This study has added the existing evidence that teachers should enhance their technological skills to keep up with the rapidly changing world. Future researchers are advised to see the after-workshop effects of such a workshop on its participants' teaching practice and professional development.
Keywords: Digital Story Videos; EFL Teachers; TPACK; Workshop

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INTRODUCTION
In language learning, achieving its goal of being able to communicate in the target language is challenging to teach and to learn. These challenges are even more escalating in an English as foreign language (EFL) setting, as it is mainly learnt in a decontextualized way in a classroom (Lee & Park, 2020), with low exposure to the target language. Under such a difficult circumstance, EFL teachers should be creative in providing contexts for language learning. The importance of contexts has been emphasized in education (Lave & Wenger, 1991), and even more in foreign language teaching, since language cannot be separated from its socio-cultural contexts (Lee, 2022).

In today's digital era, the use of technology in language learning is getting more intense. With teachers' technological innovation and creativity, English classroom activities can be

enhanced, more motivating and engaging for learners. Hence, technology has given a big influence on the variety of learning contexts, from which learners explore huge language inputs (Kessler, 2018). One of the well-established technologies used in language learning is videos with their audio-visual features that enable learners to see the context of language use for better comprehension (Shrosbree, 2008). The usefulness of videos has been further investigated. Some current studies of the effectiveness of videos in language teaching revealed that this technology, among others, had a significant positive effect on vocabulary knowledge (Teng, 2022), improved speaking performance (Aziz et al., 2020), enhanced learning grammatical points (Qadha & Alward, 2020), and improved listening comprehension (Chien et al., 2020).

With the current high production and accessibility of digital videos and animations, teachers have the privilege of selecting overwhelmingly available videos to be used in their teaching. However, gaps exist between this potential and the actual use of videos in the class due to some barriers that can be related to the quality of videos as learning media, especially their contents which are not always suitable to teachers' and students' needs. In line with this, Shrosbree (2008) stated that teachers have the opportunity to make their videos as learning media which are prepared for their teaching context. He further highlighted these teacher-made videos' potential as rich language inputs by providing models of the target language which are tailored to students' proficiency levels and interests.

The need for teachers to have skills in producing their videos is even more prominent along with the increasing practice of distance learning amidst the Covid-19 pandemic. Teachers are challenged to make rapid changes from traditional face-to-face to screen-to-

screen modes of learning. This situation has been faced across the world, not to mention in Indonesia, where many regions have problems with online learning, such as unequal access to technology and internet connectivity, underdeveloped internet infrastructure and limited digital literacy (UNICEF, 2021). In addition to that, many teachers and students were not able to engage effectively in online learning because of inadequate resources and skills. It has been reported that 67% of teachers in Indonesia had problems operating digital tools and online learning platforms (Yarrow et al., 2020). To empower teachers in dealing with those problems, there should be interventions aiming at improving their technological skills, such as training teachers to develop learning media. Especially for EFL teachers, useful learning media to be adopted in online learning is videos.

Many EFL teachers in East Kalimantan needed to have the skills of creating videos. East Kalimantan Province is located in the eastern part of Indonesia where access to technology and skills to use it are lower than those in the western part of Indonesia (Agahari, 2018). Such a condition with limited facilities and skills requires simple, user-friendly and low-budget technological tools for creating videos. Digital Photo Story videos seem to meet these categories. The software application to make this digital video is Microsoft Photo Story, a free application that provides a user-friendly way for individuals and communities to tell their story using digital photos and combining them with narration, effects, transitions and background music to create a powerful visual and narrative product (Bull & Kajder, 2004). Del-Moral-Pérez et al. (2019) ensure that producing digital stories might develop digital competencies in terms of technological use, problem-solving, and enhancement of communication, reflective thinking,

creativity and innovation. In terms of content knowledge, digital story videos can engage students in critical reflection on their own experiences, develop their digital literacy skills, help them learn subject matter from the curriculum, and entice students to participate actively in learning (Robin, 2008).

The quality of teacher-made videos should be ensured for its effective use in educational settings. Teachers need to be trained in the technical, pedagogical and content aspects of creating digital videos. In other words, the teachers must have technological, pedagogic content knowledge. Technological Pedagogical Content Knowledge (TPACK) is a framework that describes the kinds of knowledge required by teachers for the successful integration of technology in teaching (Mishra, 2019). Çam and Erdamar Koç (2021) give a detailed explanation of the constructs as the building blocks of the TPACK framework. The TPACK framework contains seven constructs as teachers' sources of integrating technology in their teaching. It includes the knowledge of technological tools (technological knowledge/TK), knowledge of teaching methods (pedagogical knowledge/PK), and knowledge of subject matter (content knowledge/CK). These three constructs can be overlapped forming other four types of knowledge: the teacher's knowledge of which technology to use for the subject she/he teaches (technological content knowledge/TCK), the teacher's knowledge of which teaching method appropriate to the subject she/he teaches (pedagogical content knowledge/PCK), teacher's knowledge how various tools/equipment can be used in education (technological pedagogical knowledge/TPK) and teacher's knowledge to present the subject with different methods by using technology (technological pedagogical content knowledge/TPCK). Teachers can combine technological, pedagogical and content knowledge in using technology to carry out teaching methods in various contents of subject matter (technological pedagogical content knowledge/ TPACK) (Çam & Erdamar Koç, 2021).

In research domains, TPACK has proved to be a useful framework for researchers in examining the development of teachers' knowledge and skills when it comes to the meaningful use of technology (Archambault, 2016). With regards to examining the quality of teacher-made videos, TPACK can play a role as a theoretical framework for the researchers to qualitatively investigate the process of creating videos and the artifacts (the teachers' videos) concerning the teachers' improvement in creating learning videos. TPACK allows researchers to investigate teachers' performance through authentic, high-level tasks (Koehler et al., 2012).

A virtual workshop was conducted to train secondary school teachers in East Kalimantan to make digital Photo Story videos as language learning media. Through workshop activities, participating teachers were expected to get many benefits, since the workshop has the function as an arrangement whereby its participants learn, acquire new knowledge, perform creative problem-solving, or innovate concerning a domain-specific issue (Ørngreen & Levinsen, 2017). In relation to that, this paper was intended to report on how the workshop was conducted to develop teachers' skills in creating digital story videos. It addressed two research questions: (a) How do the teachers develop their skills in creating digital Photo Story videos? and (b) What are the teachers' attitudes towards the workshop and their video?

METHOD

This study employed a workshop, in which by the end of the workhop the participants were expected to create

Digital Photostory videos and use these videos as learning media in their classes. In this sense, the workshop played several roles: as a means to achieve the intended purpose, as a practice to see the relationship between the process and its outcome, and as a research methodology through which authentic data were obtained (Ørngreen & Levinsen, 2017).

The target participants of this workshop were aimed for English junior high school teachers in East Kalimantan. The workshop participants were 12 junior high school teachers (11 females and 1 male) from 6 different districts in East Kalimantan Province, Indonesia. The teachers voluntarily chose to participate in the workshop and the accompanying research. Generally speaking, their technological skills were at a basic level, and many of them had to deal with internet connection. These two problems became the main considerations for preparing a workshop of creating learning materials using easy, simple procedures and software with which they could do it both online and offline. Three lecturers of the English Language Department at Mulawarman University became the instructors of the workshop and fully assisted the participants during the process of creating the videos. The instructors were specialized in English language teaching and educational technology.

The workshop was carried out online using asynchronous and synchronous platforms (i.e. WhatsApp and Zoom). It took approximately two months to complete several meetings, from pre- (preparation) to post-production of the videos. The activities included (1) preparation for video making, (2) Creating Digital Photo Story videos (i.e. working-group formation, discussion and creating videos in groups), (3) group presentation, and (4) teaching practice using teacher-made videos and reflections. Data were collected during these workshop

activities using reflective questionnaires, filed notes for focus group discussion and observations, and artifacts as the workshop's outcome (i.e. videos). The thematic analysis was adopted to analyse the collected data. The TPACK framework was used to analyse the development of teachers' skills in making the videos as learning media.

RESULTS AND DISCUSSION
The results of the study are presented according to where the data come from a) the workshop (developing skills from the process of creating digital story videos), b) the video (the target output as the evidence of skill development based on the TPACK framework) and the reflections (attitude towards the workshop and their videos).

Beginning the workshop on creating digital Photo Story videos, a WhatsApp group was created as the medium of communication among the facilitators and participants, and the main activities of the workshop took place in virtual meetings. The participants' attendance and written reflections were recorded from Google Forms, while oral reflection became a part of a focus group discussion on virtual meetings. As the workshop's output, the participants submitted their digital Photo Story videos.

How the workshop was conducted?
All of the participating teachers had experience in using available videos, such as from YouTube, in their language classes, but they never produced their videos for teaching purposes. Therefore, the first meeting of the workshop conducted on Zoom (see Figure 1) was intended to introduce them to the concept of TPACK, applications for creating videos, including Digital Photo Story and Audacity, and the workshop goals. The two software applications were considered suitable for the teachers' condition with low technological skills and limited facilities (e.g. insufficient

computer capacity and internet problems). Once these software applications were installed on computers, they could be operated offline as in Figure 1.

Figure 1 The workshop on Zoom Meeting

Through demonstration, the participants were trained in designing the video (see Figure 2, as an example) about the TPACK principles, for instance, by paying attention to different font colours and sizes for highlighting key information, the order of the segments following pedagogical considerations that facilitate student learning and the accuracy of the content. In addition to that, they also learnt how to write a storyboard, the script outlining the content of a video to be created. Demonstrations like in Figure 2.
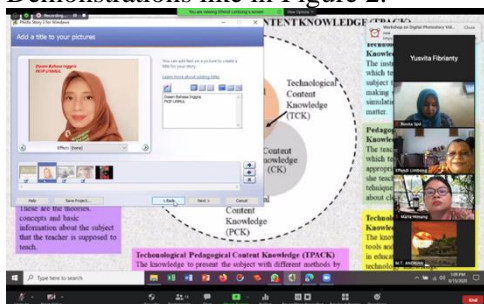

Figure 2 Demonstration of Designing A Video

On the second meeting, the teachers' technological skills (TK) were developed through hands-on practice in creating videos using Photo Story software. They selected photos or images, uploaded and arranged them into a video, added and edited sounds using Audacity with the

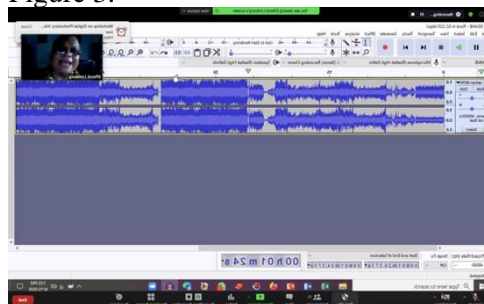guidance of the instructors. Documentation editing can be seen in Figure 3.

Figure 3 Sound Editing with Audacity

These teachers were divided into three groups of four, and each group was assigned to create one video to be used as learning materials for their real classes. The decision to have this video-making assignment as group work was because they lived in different locations and faced the pandemic situation which did not allow them to meet in person. Therefore, they used any available platforms to discuss and make videos. Another consideration for group work was based on their constraints in which many of them had problems with poor connection, insufficient gadgets and limitations in technological skills. By having group work it was expected that they learn how to build teamwork and support one another. This process made them realize that group work was possible online. They spent two weeks to finish their videos.

Their independent group work was done online using video calls and video conferences, and they also shared the work for each member (e.g. searching for suitable images and background music, preparing the contents about the curriculum, and editing the video). In this sense, their TPK and TPACK were expressed in the way they prepared the learning materials based on the valid curriculum and justified the order and contents of their digital videos in the storyboards prepared before they made the videos. While they were working on

their videos, the instructors were available anytime upon appointment to facilitate and provide assistance and consultation online whenever needed.

The teachers presented their videos on the third virtual meeting by playing them and giving explanations of the process (the stages and activities in creating and editing) they went through during the making of the videos, and the reasons for their design (e.g. the selected images, the texts, the voice, background music). The recorded narration used mostly the teachers' voices, a few of them also used their children's voices, and one teacher used an additional application to convert non-native into native speakers' voices. The other participants from different groups gave comments and suggestions towards the presented videos, before the facilitators' turn to evaluate their videos.

The peer feedback concerned with the selections of images (e.g. too small, not interesting, too crowded), the texts (e.g. the letter size and colour), the transition from one image to another (e.g. too fast/slow, not smooth), and the audio (e.g. not clear, too loud background sounds). For them, audio editing using Audacity was very challenging and had to be practised more. At this meeting, the participants also discussed their plan to use the video in their class.

After the presentation, the teachers had the chance to use their videos to teach English online in their English classes. Their TPACK was reflected in the ways they integrated the video into online teaching (TK) by sharing and presenting it during a virtual meeting), making a pedagogical consideration (PK) in what teaching stage the video is used and how to use it in teaching, and showed their mastery of the learning materials (CK). Two teachers voluntarily used the videos in their virtual class and invited the instructors to observe their teaching. The videos were first sent to the class via WhatsApp class with the instruction that

they watch the video before joining the virtual class. This would save the time of the meeting and they were expected to have background knowledge about the topic to be discussed. At the meeting, the videos were played again once and the contents were explained in more detail. The meetings were then focused more on the exercises or practice. Each class ran for about one hour and was attended by more than half of the total number of students. Online learning during the Covid-19 pandemic was mostly done asynchronously. Virtual meetings were sometimes conducted, but not all students were able to join due to unavailable appropriate gadgets and internet access. Based on the evaluation conducted by the Ministry of Education and Culture, only 51% of distance learning was implemented effectively, due to problems in access to technology, internet, facilities and infrastructure in many regions in Indonesia (Indahri, 2020).

Towards the end of the workshop, the last virtual meeting was conducted to get feedback and reflections from the teachers towards the workshop. Each of them had the chance to share their experience, opinions, and plans towards the creation of other videos and use them in their class.

The videos produced through the workshop

There were three digital story videos produced with a duration of approximately two to nine minutes created by the participants in groups. The contents of the videos decided by the participants followed the learning topics to be taught in their class, including telling the time, expressing abilities and giving suggestions. All videos used available static images from the internet. Some captures of the digital story videos produced during the workshop are presented in the figures below with the topics of telling the time, expressing

abilities and giving suggestions can be seen in Figure 4.
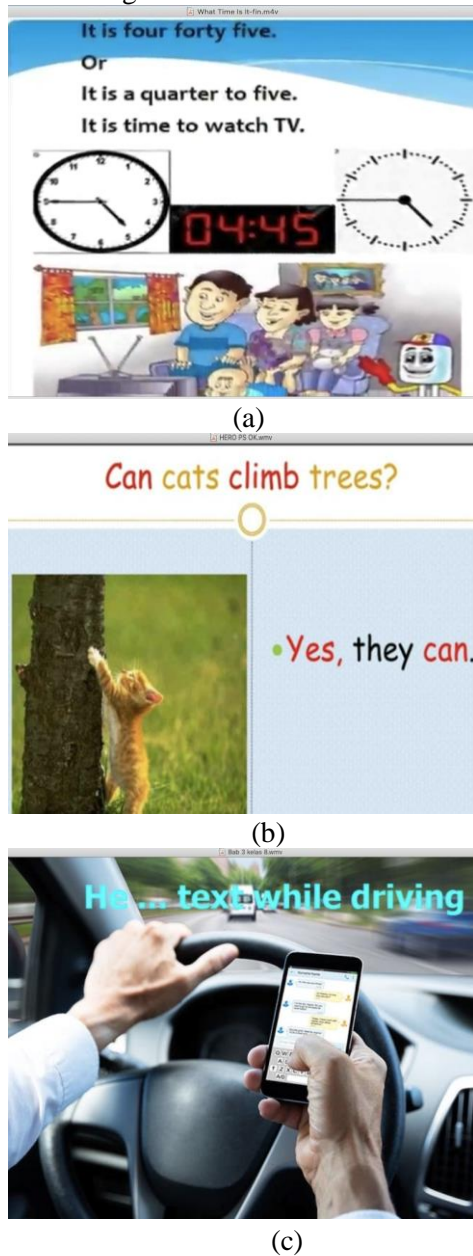

(a)

(b)

(c)

Figure 4 Giving suggestions

Two of the videos were narrated bilingually (i.e. using English first and then translated into Indonesian), and in one video the explanation was in English only. The participants argued that having a bilingual narration was important to make sure the students understood the lessons presented in the videos, considering their students' low English proficiency. All videos contained explanations and examples of English expressions being studied. The participants' TPACK were expressed in their videos. CK: The contents of the videos in the form of texts/subtitles were presented appropriately, including the concepts, spelling, pronunciation, intonation, vocabulary and grammar. TK: The teacher made optimum use of all features available in the applications. For example, the videos showed a harmonious combination between the images using Photo Story software and the recorded sound using Audacity software. The three media–images, texts, narration and background sound were blended well. A minor problem was detected in one video, as the volume of its background music was a little bit too high which slightly disturbed its narration.

PCK: The teachers presented the learning materials in their videos with some pedagogical considerations related to their students' characteristics whose English proficiency was relatively low. To give background information, all teachers began their digital story videos with the topic and goals of the lessons. Each image became the visual representation of the narration and texts. Two of the videos used bilingual (English-Indonesian) narrations to ensure that their students understood the lesson in the video when they had to study independently. The other video used English narration, as the teachers believed that the image, texts and narrations delivered the video content. TPK: The teachers carefully chose the images appropriate to the lessons and arranged them in a coherent sequence as a story to give contexts of how to use the language. They had the skills to give signals using different font sizes, colours and styles, to highlight important points and to add short, simple texts for effective presentation of the materials and for keeping the videos short. All

teachers started their digital videos with the topics and goals of the lesson to inform their students what the videos were about. Some TPK-related elements could be found throughout the videos. For example, in one video the teachers taught "What time is it?" using Photo Story and Audacity, the teachers presented an image of a family watching a TV program, with the text below it "It is time to watch TV" and with the energic background music. The meaning of the sentence and its structure were made clearer with the image. TPACK: Overall, the teachers' TPACK was detected in the process of making the video and the video itself. In this sense, the teachers were able to create videos as a language learning media that can be used by the students either independently or with the teacher's guidance. The teachers could also use and share their videos using accessible platforms synchronously or asynchronously.

Attitudes towards the workshop and the videos

The last virtual conference was well spent on reflections. In addition to their written reflection, each participant expressed their opinions about the workshop and plans. Almost all of them said that it was the first time they learned how to make a video as learning material. One of the participants had attended a similar workshop but he said the process of video-making was not explained in detail. They recalled the process of making the videos during the workshop, from using Photo Story to select, import, crop and arrange photos or pictures, and add texts, to using Audacity to mix background sound and narration to the videos:

> *I got the ways to import many pictures, give effects, settings customize motion and the duration of display pictures.*
> *I learned how to edit some photos using Photo Story Program. It was*

wonderful. A photo could be more interesting by adding transitions, texts, motions and so on.
I've learned the basic steps to make the background music, the process of importing the instrumental music, cutting the part of the song, and combining some music with the voice recording (narration) for the content.

All of the teachers gave positive feedback on the workshop. They gained new knowledge from the facilitators, and other teachers and experiences in creating the videos, and also broadened their networks as they met other secondary teachers from different districts in East Kalimantan.

In relation to the use of videos in teaching, they said that videos as learning media facilitated their teaching, for instance in explaining the lessons more clearly and as a substitute for teacher presence during online learning. Meanwhile, the students, thought that their students would have varied, up-to-date learning resources, and with audiovisual presentation, video content made learning materials clearer and more interesting. These might help the students understand the lessons better, increase class interaction, and build a positive attitude towards learning English. Some of the participants' comments on their digital story videos:

> *Even though it's the first time I used a Photo Story video in online learning, I think, the benefit was my students were more interested because there are variations in media, such as images, sounds and music, so it may be easier to understand.*
> *I am very grateful for having the chance to take part in this workshop, as the video we have made will make English lessons clear and more interesting,*

increasing interaction which might lead to better learning achievement.

Based on the teachers' experience in using their videos, they shared the videos a couple of days before the meeting virtual classes, so that the students could watch them and be prepared for the class. One of the teachers even reported that from the lesson using the video, their students' evaluation gained very good results. Their reflections on the use of their videos in their English class:

> *Since the time for virtual class is limited, only 15 minutes, I shared the video on Google Classroom before the meeting and they could understand the material presented in the virtual class.*

The evaluation result showed an increase, as the students answered the test correctly 100%. However, some of the teachers mentioned a few problems. Several students did not watch the videos before the meeting, and consequently, the videos were played once during the virtual meeting. Another problem was related to the process of creating the video which was time-consuming while they faced overloaded work. They wished to have a simpler and easier application to shortcut the process of making videos.

Their participation in this workshop led them to think of some plans, including improving their technological skills. They planned to do more practice in audio editing since this skill was considered complicated, make animated videos, learn other video maker applications and how to make electronic books. Additionally, they wished to enrich their repertoire of teaching techniques using videos.

This study evaluated an online workshop designed to improve teachers' skills in creating digital story videos. Two research questions addressed in this study were: (1) How do the teachers develop their skills in creating digital Photo Story videos? and (2) What are the teachers' attitudes towards the workshop and their created videos? The discussion is presented about these research questions based on the research findings described above.

How do the teachers develop their skills in creating Photo Story videos?
The development of the participating teachers' skills in creating digital Photo Story videos was shown from their activities and output of the workshop concerning the TPACK framework. This framework was considered an effective tool to examine teachers' performance in technological use in education (Archambault, 2016). Through their participation in numerous workshop activities and the results they produced, the participating teachers honed their abilities to produce Photo Story videos.

The workshop comprised five Zoom meetings to employ scaffolding stages, and temporary support to enhance learning (Richardson, 2022). Richardson confirmed that this supportive strategy was appropriate for the online learning environment as it transformed the teachers' role as content deliverers to become a facilitator and even co-participants. In this workshop, the scaffolding strategy was implemented following three main activities (Sharma & Hannafin, 2005): the initial activity was establishing goals by introducing the participants to the workshop activities and goals, and providing them with the important concepts, skills, and examples related to TPACk and digital Photostory videos; the second activity was negotiating and refining the goals through discussions upon the preparation of creating the videos; and the third activity was using the knowledge and skills gained in the previous activities and with the expert support to reach the goal, that is, producing digital Photostory

videos to be used as learning material in their English classes.

The process of making digital story videos and the videos they produced became strong evidence that their skills in creating digital story videos were developed. Their technological knowledge (TK) was expressed by their ability to use all features in the software applications to make the videos. Knowing how to operate digital technologies is considered an essential part of teachers' knowledge base (Angeli et al., 2016). With the technological knowledge (e.g. TPACK principles, Photo Story software and Audacity software) introduced in the workshop, for the first time, the teachers experienced the process of making their digital story videos as learning media. In this sense, they were no longer only the user of available videos, but also the creator of videos to be used in their English class. Creativity is one of the characteristics of good teachers and is also linked to the level of students' attainment (Richards, 2013). By having experience in producing videos in this workshop, the participating teachers' skills in creating their learning media developed along with the development of their TPACK. In other words, this transition in their function as creators reflects their skill growth in tandem with the advancement of their TPACK.

Compared to commercial learning materials, teacher-made materials are deemed to have more potential to accommodate learner needs. Lapriore (2018) emphasized that local teachers have a new role in material development as the local, legitimate authors who are capable of identifying their classroom needs and making use of available resources. This notion was detected in the learning materials presented in the participants' videos. The produced materials were appropriate to the valid curriculum, the student's English level and their learning condition, as the

participating teachers taught their classes using their Photostory videos.

With regards to the TPACK framework, the correctness of the concepts and language elements (e.g. grammar, vocabulary, spelling, and pronunciation) indicates their content knowledge (CK). The teachers tried to make the lesson simple and clear by providing explanations and examples in addition to the images and using signalling (e.g.different font sizes, colours and styles) to highlight key information (Brame, 2016). Signalling can direct students' attention to target elements, which eventually helps them retain and transfer new knowledge from animations (De Koning et al., 2009; Mayer & Moreno, 2016) or videos (Ibrahim et al., 2012). The skill in adding signalling by modifying on-screen texts and symbols required their TPK. Apart from that, all videos produced through this workshop were relatively short with a duration of more than two to nine minutes. This length of time was appropriate to make students stay focused, considering that watching time more than 6-9 minutes would drop student engagement (Guo et al., 2014).

The activities in creating videos were the works of TK, PK, and CK, as well as their overlaps (TCK, PCK, TPK, and TPCK), as demonstrated by the teachers participating in this workshop. In reference to the TPACK framework, the teachers' ability to make the digital story videos, present the learning material digitally, design it in such a way that facilitates their students' learning, and use their videos in their class becomes authentic evidence of the development of skills in creating digital videos as learning materials. Overall, the workshop improved the teachers' technological, pedagogical, and subject knowledge within the context of the TPACK framework, which helped the teachers expand their skills in producing Photo Story videos.

What are the teachers' attitudes towards the workshop and their created videos?

The workshop conducted in this study provided its participants, in this case, the secondary school teachers in East Kalimantan, with knowledge and skills to create digital story videos to be used as language learning media in their classes. As a research method, the workshop generated rich, authentic data which revealed not only the development of the teachers' technological skills but also their attitudes towards the workshop itself, their practice and products.

The teachers expressed their positive attitude towards the workshop, as they obtained new knowledge and skills from the workshop activities. Therefore, this virtual workshop was deemed as a shared space (Ørngreen & Levinsen, 2017) and a collaborative space (Williamson et al., 2021) where the people involved shared information and did collaborative work to achieve a particular target, that is creating videos. In this sense, the workshop played its role as a means to achieve the intended purpose. The teachers also considered the workshop as a social space (Williamson et al., 2021), as under the current work-from-home situation due to the Covid-19 pandemic they were able to expand their networking - socialising and collaborating with other teachers from different regions, mediated through virtual conferences.

Similarly, the teachers' attitude towards the videos they produced was positive. They believed that the videos offered benefits to both the teachers and the students. For the teachers, the videos could replace their presence during distance learning and vary learning media. For the students, the videos could offer interesting audio-visual learning sources, and provide background knowledge related to the topic discussed during a virtual meeting, which then led to increased participation in class. Their positive views confirmed Brame's (2016) statement on the potential of videos as effective educational tools that contain cognitive load, and promote students' engagement and active learning. In addition to that, multimedia materials like videos offer a wide range of resources for independent learning, as students can use them in their own space and pace (Arnold & Rixon, 2008)

During the process of producing the videos, the teachers faced a few technical problems, especially in editing background sound using Audacity software. Since it was their first experience, they just needed more practice in operating the application. Another problem was related to the time spent making the videos, which increased their workload. Teachers should invest his/her time in producing a video or working with any digital technological tools, but it is worth doing, considering the benefits it offers. Once teachers produce a video, it can be used repeatedly and in the long run, it will even save their time.

Above all, the process and problems they encountered inspired these participating teachers to improve their technological and pedagogical skills, especially those related to video-based teaching. In this case, Kessler (2018) has argued that due to the significant contribution of digital technologies to shape good learning conditions, language teachers should be aware of the potential of digital tools and learn how to integrate them into teaching.

Teachers play a significant role in the successful integration of technology in education, (Li, 2017) reviewed that the way teachers utilize technology, and their skills and attitudes relevant to its effective integration into the curriculum ensure the maximum benefit of technology. Consequently, teachers need to be equipped with technological skills through pre-service and/or in-service

training, workshops or other kinds of professional development programs. Any form of such upgrading program should consider teachers' conditions to make sure what they have been trained in applies to their teaching contexts. This study has added the existing evidence that teachers should enhance their technological skills to keep up with the rapidly changing world. Future researchers are advised to see the after-workshop effects of such a workshop on its participants' teaching practice and professional development.

CONCLUSION

The workshop on generating Photostory videos as teaching material has achieved its targets since it was carried out as planned, and the videos as the target output were produced based on the TPACK framework. Through the scaffolding stages, the participating teachers developed their skills in creating Photostory videos by understanding the concepts of TPACK, gaining knowledge and skills in producing the videos, and having experiences in using the learning media in their English classes. These become the signs of growth among the teachers, not only in technological skills but also in other areas. Despite some technical issues, the workshop had a positive affective and social impact, as the participants were delighted with their videos and their networking expanded through collaboration with colleagues from several districts.

However, there are several drawbacks to the workshop, such as a lack of assessment and insufficient long-term evaluations of teacher-produced videos. To solve these limitations, it is proposed that future workshops adopt a clear assessment technique that takes subject knowledge integration, technical competency, and instructional efficacy into account. Implementing a long-term monitoring and support system will aid in determining the feasibility of teacher-

created films over time, as well as providing ongoing assistance and resources. Along with rapid technological advancement, it is also suggested to conduct other workshops on creating learning materials and/or media using more current applications to enhance the workshop contents and delivery.

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