Video-making Projects for TPACK Development of Pre-service EFL Teachers

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Abstract This study examines the impact of the video-making project assigned for pre-service teachers in English education department to enhance their competences of TPACK. Anchored in a qualitative approach, semi-structured interview with six student teachers in second semester was conducted to gain their voices on whether producing video as part of tasks in two English subjects facilitated them on learning new insight related to technology, pedagogy and content of some materials. Findings reveal video-making projects promoted self-eagerness to improve self-competence and collaboration with peers and lecturers. Consequently, making a video as tasks showed a potential for developing pre-service teachers' TPACK. Participants' voices indicated there were some challenges in video producing process. The study also suggests that there is ample room for improvement especially in preparing student teachers with prior knowledge of using technology.

Keywords: ICT; Pre-service teachers; TPACK; Video-Mediated Task; Video Project.

Abstrak Studi ini mengkaji dampak tugas bentuk video pada mahasiswa calon guru di pogram studi pendidikan Bahasa Inggris. Mengacu pada pendakatan kualitatif, studi ini menggunakan wawancara sebagai metode untuk mengumpulkan data pada enam orang mahasiswa semester dua untuk mengeksplor bagaimana perasaan mereka ketika mengerjakan tugas pada dua mata kuliah. Temuan dalam penelitian ini mengungkapkan bahwa tugas membuat video memunculkan kesadaran dan kemauan diri untuk berkembang serta memfasilitasi kolaborasi dengan rekan sejawat dan dosen. Terdapat tantangan yang dihadapi mahasiswa selama proses pengerjaan tugas. Selanjutnya, tugas membuat video juga memberikan potensi yang baik dalam mengembangkan keterampilan pemanfaatan teknologi mahasiswa calon guru.

Kata Kunci: ICT, Pre-service teachers, TPACK, Video-Mediated Task, Video Project

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INTRODUCTION

The COVID-19 pandemic has forced education sector to adapt with advanced technology. As we know, the technology advancement is growing fast as well around the world. Like a blessing in disguise, the pandemic covertly or overtly has transformed the education system into digital-based system as the impact of technology development (Hall & Connolly, 2019). From our experiences as lecturers and students, this condition has impacted learning activity especially in university level in Indonesia that educators in the classroom mostly assign their students to make videos as part of the tasks. The challenges of pandemic condition force schools and universities to adapt with some internet-based teaching applications (Tukan, 2020). Making-video is considered as a shortcut and an effective tool to mediate digitalization and learning process amid technology-demanded situation.

From the lens of task-based language teaching (hereafter TBLT) paradigm, creating a video can be possibly considered as an effective and acceptable tool to promote authentic and creative language learning. However, there are some particular considerations in order to adjust the task meet the requirements of TBLT. Anchored in Ellis' construct (2009), the 'task' in English language teaching comprises (1) a focus on 'meaning'; (2) dealing with 'gap' to achieve ; (3) reliance on learners' language competences involving linguistic and non-linguistic storage; and (4) a determined outcome as a goal of the task.

Situating in English education department of a university in Indonesia, this study intends to discover the classroom practices containing video-created as one of the tasks. In the limited space to practice, EFL lecturer tend to assign students to create videos. This such practice may also occur in other universities because of the effectiveness and the efficient of making video. In this study, the students who took reading for pleasure and basic grammar subjects were assigned to some videos related to each subject. The students were given some materials and then assigned to explain certain topics by their own. This task may provide some experiences to students both either technological or pedagogical aspects. The terms technology and pedagogy are linked to Technological Pedagogical and Content Knowledge (hereafter TPACK).

This study is considered as a pilot study to reveal students' perception on technology-enhanced learning. The use of video-making as a task enables learners to access authentic technology and later this facilitates them to develop their TPACK competences (Mouza and Karchmer-Klein, 2015). The experience of using ICT has been reported in scholar study positively improving students TPACK development (Bueno-Alastuey et al., 2018). Bueno-Alastuey et al. (2018) observed how *telecollaboration* contributed on students' TPACK development. The study highlighted pre-service teachers from universities in Spain participating in online video interaction as tasks and then were invited to interview sessions. The results showed that potential impact on students' collaboration, participation, and attention on TPACK components. However, the study reported on the impact of video-making project as tasks especially in the context of Indonesia is scarcely found. This study aims to fill this gap.

The teachers' competences in this current era not only comprise pedagogical knowledge but also how to bring technology into classroom. Conventional way in which teachers use white board as medium to explain the materials has slowly been shifted. Therefore, in attempt to preparing prospectus teachers or pre-service teachers with adequate technological competence, teacher educator program needs to introduce technology-enhanced learning to ensure student teachers fluent with technology (Koehler & Mishra, 2005). Meaning that they need to be aware of the latest tools of information, communication and technology in order to understand and be able to include them into their educational practice (Koehler et al., 2013; Koehler & Mishra, 2005).

The learning paradigm may be different in the future educational system. As the matter of the current 21st century facts, engagement and collaboration are dyad that teacher educators need to focus on (Hannaford, 2016; Wismath, 2013). In the myriad of technological tools and advances, individual needs to collaborate with others in order to survive in the jungle of modern technologies (Tierney, 2018). Considering this in mind, the practices in the classroom should align with these propositions and one of the ways to realize it is through assigning meaningful task. By designing a task involving TBLT paradigm and authentic access to technology, a video-making project as task can be implemented to enhance students' TPACK competences.

To frame the research, this study aims to investigate the students' perception on video-making project as a task whether the students have positive response to this method or even vice versa and to figure out the impact of this type of task toward their TPACK development whether this type of task has the advantages on their creativity and language skills and benefits to be a teacher in the future. In order to make sure the research in the right path, the research questions proposed under study are:

a. What benefits of video - making project are gained by students in relation to TPACK development?

b. What challenges do students face in video making project in order to develop their TPACK?

c. What are pedagogical implications for better video-making task implementation in the future?

METHOD

Research Design

Rooted in qualitative approach, interview form (Barbour & Schostak, 2005) with semi-structured interview was generated to gain personal accounts of students toward video-making projects. There are pre-determined questions developed from Bueno-Alastuey et al. (2018) involving: perception toward video-making project as a potential task, challenges in making a video, technological skill acquisition, learning skills possibility, and potential pedagogy development.

Participants

The students of English department in one of Indonesian State Islamic Colleges were recruited as participants in the study. They have agreed and completed prior consent forms before joining the study. The participants were chosen purposively by considering the result of the created videos including the quality of the content, the presentation, and creativity of the videos. Though these aspects are considered as bias because of using subjective selections, all authors have discussed the chosen participants and recruited those who were available and accessible for this study to make sure the consensus of the chosen participants. There are six participants in total

under the study. All of them told that they had started to learn English from primary school level. Only two of them revealed that they have had experiences in getting to master English through private tutors in last three years. This may impact on students' content knowledge of English language competences and skills. The detail data of each participant can be seen in the Table 1.

Table 1:

Participants' demography

Participant	Age	Sex	Duration in learning English
SM	19	Female	10 years
RZ	19	Female	10 years
RA	19	Female	6 years
MP	23	Male	6 years
HR	19	Female	10 years
NS	19	Female	10 years

Data collection procedure

The procedure of data collection was commenced with preparing the instrument for interview session. An interview guideline was generated to gain insight from the participants. To do this, all authors except the first author collected the data through interview. As the spread of COVID-19 becoming high in Indonesia, the government had released the rule of restriction towards community activities (PPKM in Indonesian). Bearing this force in mind, the interview sessions were conducted not in face-to-face but by using mobile phones. Employing *Whatsapp* application, the questions were delivered using its features namely chat, voice note and voice call. All the voice notes and call were recorded. From six sessions, only one of them was conducted in written form through chat. Afterward, all the audio recordings were transcribed based on transcription on conversational analysis (Wooffitt,

2005). All the authors manually transcribed the audio recordings and typed them into Microsoft word format.

Data analysis procedure

To begin the data analysis procedure, selection was conducted. All the written interview transcripts were observed to choose several excerpts containing insight on perception of video-making project. Drawing on previous studies related to students' TPACK development (Bueno-Alastuey, Villarreal, and García Esteban, 2018; Cavanagh and Koehler, 2013), we used several parameters as a basis in selecting phrases indicating benefits, challenges, and also critical incidents of pedagogical implication. Afterward, we do thematic analysis following Braun and Clarke's (2006) conception. Some major themes then were decided by considering common findings. Ultimately, we gathered four major themes for benefits and challenges and displayed them in the following findings and discussion section.

RESULT AND DISCUSSION

Students' voices reveal some benefits and challenges in video-making as a task for pre-service teachers. The result and discussion are presented to answer three research questions proposed in the study namely the benefits, the challenges and pedagogical implications. The findings are displayed into major themes based on personal accounts gained in the interview.

1. The benefits of video-making as task

Regarding the benefits of the project in creating video, there are several ideas pointed in the interview results. All the findings are grouped into similar major themes as follow:

 a. Shaping technological advances

Assigning a technology-based task is not an alien for current learners. They have lived in this advanced technology era. The result of the interview figured out all participants have been familiar with video-producing though some of them only master a simple video-making ability. This finding indicates the task which was designed to deal with technology may facilitate deeper understanding of technological mastery (Adedoyin & Soykan, 2020).

As an obligatory assignment from the teachers, students are forced to produce a ready-to-publish video. The interview record reveals some participants learn a new application for editing video or even explore some new features in the application they have already installed.

Mmm… actually I prefer video (than written task), may be this is more interesting, because there are graphic, design, something like that (interview transcript, RZ)

In creating video, I sometimes add color grading, I want to pleasure audiences, avoid boredom, I also add music (background), animation, even subtitle and I try to deliver language content as simple as possible (interview transcript, RA)

b. Triggering self-eagerness to acquire new knowledge especially in terms of technology

Some students stated that they explored how to use the application of video-maker by themselves. The expectation of creating a good-to-watch video underpins their curiosity to do trial and error in the video production process. In editing process, produced video is able to be viewed many times before rendering as final product of the video. This phase enables students to shift their perspective of making video from reflection-on-action into reflection-for-action (Sydnor, 2016). Therefore, assigning video project repeatedly may positively improve and develop students' self-motivation and self-eagerness on technology. They accessed references from google and *Youtube* and used those resources for inspirations in creating videos.

One of advantages gained by students is able to learn editing video application and it increases self-confidents to do public speaking and in front of camera. I feel satisfied with the result since it had been edited with some additional animations. (Interview transcript, SM).

From the interview data of several participants, it is known that this video assignment has positively impacted speaking skills, especially a confident to speak up in public space. Moreover, students can master several new techniques in technology such as how to find references through applications, gain new editing knowledge and improve their sense of creativity. This is reinforced by one of the interview transcriptions described by MP ''*Yes, I learn a lot from Youtube*''. This proves that assignments in the

form of videos can trigger a person's desire to be more proficient in the use of applications so that they are triggered to always learn until they are proficient enough in using certain application.

c. Promoting collaboration with classmates

Participants' voices revealed that they discussed with their classmates once they got trouble with video editing. RA admitted that "*I ask my friend's help when I met struggle in operating the application*". This condition is acceptable since not all of students possessed digital competence though they are living as digital natives (Adedoyin & Soykan, 2020). This indicates the task not only imposes individual exploration but also invites students to involve in social interaction through asking and responding to other pupils. The interaction created in this proposed task gives positive vibes regarding collaboration and knowledge sharing which this is in the same vein of new literacies perspective (Kalantzis & Cope, 2012). Though there possibly exists an ego-centric issue that learners are competing to be the best in the class, the students still willingly help each other.

d. Improving confidents and speaking language skills.

Every student has unique characteristics in acquiring language. This is also influenced by student's internal factors such as confident. Talking about video-making, the results of the interview showed video-making help students to improve their confident and speaking skills as well. Some of them argued that they used to be nervous in public one of the participant argued that:

> "*I feel more confident to speak in front of camera rather than speak face-to-face in public with many eyes on me. In creating video, I am alone in a room, without audiences. It helps me improving my self-confident.*" (interview transcript, HR)

The phenomena shows that some students possibly choose to speak directly with audiences as it highs up their confidences while some others tend to choose speaking indirectly through camera because of more engaging and improving their confidences. This is in line with the study from Campbell et al. (2021) suggesting that student-created video activity offers language skills development. Teacher educators must grasp this portrayal of ELT issue

and use this as consideration in designing instructional design in the classroom. To mediate the issue, strengthening on positive impact and benefits of habituating speaking in front of video may positively contribute on their familiarity of video-making. This will lead to help them creating more videos confidently. When they make English-mediated video, the great number of video- production process indirectly increases chances to use English and indirectly may improve students' language skills.

2. The challenges of video-making as task

Despite the benefits offered in video-making activity, there are also challenges found in collection of students' perception. The challenges involve lack of supporting devices to support high quality video production, low level editing video skills, and limited mastery of knowledge about English language skills. The detailed discussion is presented below.

a. limited supporting devices to facilitate high quality video

The sound of participants' voices revealed that some of them commented on utility obstacles due to low specification of their devices. The problem was the small amount of storage space on the participant's mobile phone or laptop. This was identified in RA's statement about limited storage in mobile phone so that it was impossible to install high quality application to produce high quality video respectively. The problem of device also occurred in MP's experience. Using different device, MP used laptop as a medium to edit the video. He said that "*there is an obstacle in term of low quality device. My laptop, with 4GB RAM, always find trouble in running the Filmora application (video editor) smoothly*". It can be summed up that the challenge for the participants is having limitations in existing facilities to make better quality videos for their video product. They may feel unsatisfactory toward the video's result. However, this problem can be solved by several ways, such as ask to their lecturer to make some teams to complete this assignment and ask other pupil to help those with unsupported devices by working collaboratively.

b. Lack of ability to operate the application

Participants expressed that the lack of ability to use editing applications is also a challenge in getting good videos with maximum good results. The following is an interview excerpt from a participant named SM:

…Maybe…lack of …what is that…editing tools (interview transcript, SM)

c. Lack of content knowledge about materials

There were several challenges that participants experienced in working on video-making tasks, one of the participants expressed a complaint which also became a new challenge in making tasks in the form of video, namely the lack of mastery of the material to create good and pedagogically-accepted content. Content knowledge is fundamental in further using it as material explained in the video. The voice indicated that there is a gap of student teachers' existing knowledge on English language skills. The evidence is given in the excerpt below:

Maybe…lack of …content mastery, so that while we are explaining content in the front of camera, we need to focus on recalling back our memory on that content, it is bothering in order to express and present material in the video perfectly (interview transcript, NS)

d. Low internet connectivity

In addition, in making a video, there is also geographical obstacles especially for students who still live in the area with bad signal. This implicates on navigating references that some students have difficulty in finding related references or materials, as evidenced by R's voice "*Sometimes the problem is in the connectivity, I cannot access to internet when I need to.*" So, one thing that can be another obstacle for students when they are going to make videos is to download references. This condition may give effect on the development of student's technology competence. However, this can be overcome by changing references from internet-based sources into conventional resources namely books and asking pupils who master the material. By doing these, students can still deal with TPACK development.

3. Pedagogical implication

A participant revealed that feedback and responses from teachers and other pupils help the development of their mentality and confident. It can be note for future classroom practices in implementing video-making project to

add feedback and responses from audiences as part of the instructional designs. For instance, assigning other pupils to leave feedback and comments while the video is published publicly. The interaction between creators and audience may arise collaborative meaning making (Tierney, 2018). In other words, when they personally feel that this such activity is helpful and meaningful, it may inspire pre-service teachers to do similar activity in the future.

Further, the excerpts indicated students are aware of their professional identity. Two of the participants revealed that the video-making task is important for them especially while working as teachers in the future having students with high-technology surroundings and massive multimodal communication. They recognized video as audio and visual contents and this related to the condition of 21st century students which are close to multimodal communication (Kalantzis & Cope, 2012) . The teacher educators need to pay attention on this issue as introduction before assigning task to students. The information of future portrait may shape students' motivation and engagement in creating good and valuable videos.

From the view of socio-constructivism and interpretivist paradigm, students are possible to perceive negative perception on video-making tasks. Thus, teacher educators as managers in the ELT practices should anticipate possible background of the pessimist beliefs. A participant's voice disclosed that there is opposing views toward video-making assignment. The statement suggested the participant argued that editing process took so much time and this was less effective when it was used as a task. The evidence can be viewed in the excerpt of interview session with HR.

> *This…less effective…the editing process, split and join the videos, it's lengthy work to do* (interview excerpt, HR)

To avoid misperception or negative perception toward video-making project, the understanding of the importance of technology-enhanced learning should be instilled to pre-service EFL teachers. This contributes on suggestions for educators to consider more timing for planning and to follow up the updates from the students' project (Campbell et al., 2021; Campbell &

Cox, 2018). They may realize that certain activity leading to technology exploration will help them enriching their instructional choices. As stated by RA, she highlighted that the video-making task may be the right choice in case of a condition like COVID-19 pandemic in which people are forced to stay at and learn from home. She also added her belief on the usefulness of experiencing video-making task for her teaching practices in the future.

CONCLUSION

The practice of video-making assigned to students becomes common in university context as a way to anticipate the shifting of learning mode from offline into online amid pandemic. For pre-service EFL teachers, this type of task is considerably potential to develop their TPACK competences. The excerpts of student teachers' voices suggest this activity supports student-centered paradigm by activating learners' self-eagerness to explore and figure out new features of technology, providing collaboration with other pupils in designing the presentation of the video, and improving students' competence and confidents in operating video editing tools and producing best quality videos. However, the students faced some obstacles in accomplishing the task. The factors are low quality device and support from lecturers for materials. Recommendations are made to teacher educators by paying attention on giving feedbacks and responses toward videos produced by learners and introducing collaborative work in making videos. There is ample room for improvement since the video-making as task offers technological experiences for pre-service teachers. The suggestion is in instructional design where English language department have to concern on TBLT framework. What a task should be regarding authenticity on experiential and relational perspective is pertinent to be socialized for teacher educators. Moreover, for future researchers, the topic of TPACK have been massively reported by scholars though some elements such as various contexts, concepts and perceptions are still potential to study. In the world of digital age, pre-service teachers' TPACK will be catalyst for the success of Indonesian English language teaching in the future.

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