Email: jklppm@undikma.ac.id

An Investigation of EFL Preservice Teachers' Attitudes and Motivations in Developing a Digital Learning Video

Tri Wintolo Apoko*, Silih Warni

English Education Department, Faculty of Teacher Training and Education, Universitas Muhammadiyah Prof. Dr. Hamka, Jakarta *Corresponding Author. Email: triwin apoko@uhamka.ac.id

Abstract: This research is aimed at investigating EFL preservice teacher's attitudes and motivations in developing a digital learning video and the difficulties found in developing a digital learning video. The research was conducted at University of Muhammadiyah Prof. Dr. Hamka. There are 67 EFL preservice teachers who became the participants taken by purposive sampling technique. A mixed method was used. The questionnaire was distributed to all participants to respond to their attitudes and motivations, and nine participants were invited to have an individual interview. A descriptive statistic was used to analyze the questionnaire data and a description and image analysis was utilized to analyze the open-ended questions and the interview data. The results show that (1) the EFL preservice teachers' attitudes in developing a digital learning video are in the higher level as the mean of their responses from four items ranging between 3.16 to 3.21, (2) the EFL preservice teachers' motivations in developing a digital learning video are also in the higher level in which the mean of their responses ranged from 3.12 to 3.36, and (3) the difficulties faced in developing a digital learning video include: skills of using applications, providing materials, software capability, confidence, and time availability. Therefore, the implications cover the learning video quality produced by EFL preservice teachers to attract students' attention to learn English better, the variety of video editing applications used in overcoming students' learning boredom, and encouraging EFL preservice teachers to continue learning and practicing to create and edit the videos better.

Article History

Received: 10-03-2022 Revised: 16-04-2022 Accepted: 28-04-2022 Published: 04-06-2022

Key Words:

EFL Preservice Teachers; Attitudes; Motivations; Digital Learning Video.

How to Cite: Apoko, T., & Warni, S. (2022). An Investigation of EFL Preservice Teachers' Attitudes and Motivations in Developing a Digital Learning Video. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran, 8(2), 355-366. doi:https://doi.org/10.33394/jk.v8i2.4933*



This is an open-access article under the CC-BY-SA License.



Introduction

In the globalization era, technology is a must for teachers to use in managing the teaching and learning quality. More teachers are utilizing various platforms of technology to teach their students to make the teaching and learning process conducive, interesting, and enjoyable (Raja & Nagasubramani, 2018) as well as more independent and deeper (Mu'min, 2019). In fact, in the situations of pandemic of Covid-19 schools and universities have been running a learning policy to overcome the rapid shifting from offline learning to full online learning for almost two years (Prastikawati, 2021), and this will last longer since the new variant of Covid-19 emerged, that is Omicron. However, some schools and universities have been trying to implement the hybrid learning with strict health protocol for the sake of avoiding the learning loss (Mulhayatiah et al., 2021). This happens as some problems arise on the students when they are learning by online such as in understanding the materials, how they are communicating with their lecturers as well as the lack of internet connection (Patricia Aguilera-Hermida, 2020).

Email: jklppm@undikma.ac.id

This current situation therefore requires the creativity (Pokhrel & Chhetri, 2021), the teachers' new roles and competencies (Atmojo, 2021) in overcoming the virtual limitations such as the preparations of making digital and interactive learning media used for the students to learn and practice more through asynchronous mode of online learning. When teachers use a learning media (e.i. learning videos), the students' interests will increase (Wijaya et al., 2020). Previously, most teachers used learning videos from other people's YouTube channels. They shared the relevant videos to the students to learn and practice the materials in the classroom. This lasted longer before the outbreak of Covid-19 came. At present more teachers create their own videos as well as their own YouTube channel as they think that the videos are more understandable, interactive, and effective for the instructional media (Saed et al., 2021). This is consistent with the previous study by (Noetel et al., 2021) telling that the videos edited could give more coherent, beneficial, authentic, and more effective as well as interactive.

For EFL teachers, developing digital learning material such as learning videos is not easy. Video is a powerful instructional media that combines audio dan visual and deliver information or messages (Laksmi, N.K.P, Yasa, I.K.A, Mirayani, 2021). According to Borko at al in (Deesomsak et al., 2013), video is a virtual tool to allow a relatively authentic presentation of complex classroom conditions. In addition, Chien et al in (Moreno-Guerrero et al., 2020) point out that video is a virtual device and a great model for multimedia learning. One of learning video types is a digital learning video. According to Rozi at al in (Adriani et al., 2021), a digital learning video could be defined as the audio and visual media delivering learning materials digitally or through computer software. Thus, the use of video is not only to facilitate the students' interest in the classroom as well as to stimulate skill acquisition, but also to increase the effectiveness of language practices (Maru et al., 2020). However, explaining the materials directly in the classroom to the students is different from explaining something in front of the camera without the students' presence. It needs a lot of training and adaptation to be in front of the camera as well as the commitment and motivation to practice editing the video better. More teachers join some trainings and workshops on creating learning videos and how to integrate ICT in English learning, and these attempts are believed to increase their ICT skills and media utilizations as (Hashim, 2018) suggested, teachers must be able to provide the digital and technology-based contents to teach including using social media.

Talking about attitudes and motivation, these variables are the important components in the teaching and learning process. Pintrich, Marx and Boyle in (Atilboz, 2021) stated that attitudinal and motivational variables were related to the student's conceptual change process. Erdemir, & Bakirci in (Guido, 2018) stated that attitude is a tendency of individuals organizing emotions, thoughts, and behaviours towards a psychological object. People will learn attitudes after they were born. They learn attitudes based on their own experiences, knowledge, and skills as well as from other sources. Nevertheless, attitudes could change.

Meanwhile, learning motivation is influenced by someone's attitudes towards learning the subject. Gardner and Lambert in (Guido, 2018) said that motivation in learning is the idea to be determined by his attitudes to the other groups in particular and his willingness to the learning activity. There are extrinsic and intrinsic motivations. In extrinsic motivation, students need other people such as their friends, parents or lecturers to do something for their grades or recognitions. In addition to extrinsic motivation, students have their desire to learn and practice for certain activity (Guido, 2018). In the context of teaching and learning process, motivation is required to occupy the students' attention to the lesson in the class. Thus, teachers have to understand their distinctive motives among the students on their

Email: jklppm@undikma.ac.id

personal interests and experiences (Dahliana, 2019). Therefore, to prepare for teachers who are motivated and willing to teach by integrating ICT to make the teaching and learning activities more challenging and interesting require more qualified human resources from universities which generate professional teacher candidates.

University of Muhammadiyah Prof. Dr. Hamka as one of the private Islamic universities in Indonesia owns the Faculty of Teacher Training and Education where many teachers in Indonesia were produced in this university. Therefore, those who are willing to be teachers may join this university as the curriculum provides the excellence in spiritual, intellectual, emotional, and social intelligence. Students learn not only about what teaching and learning is, but how to behave in good doings and how to teach professionally as well.

In line with this, the EFL preservice teachers should be well-prepared before joining the teaching practicum at schools and having a real teaching. Preparation of developing a digital learning video is one thing they need to do, and this is covered in the curriculum of English department, namely: ICT in EFL. This course provides the students to be able to understand on the ICT in EFL, to use various applications in teaching English, to assess online learning, and to develop learning videos with some available software applications. Dealing with this, students are encouraged not only to understand the concepts of ICT in EFL, but also to produce some digital learning videos for their own teaching practicum preparation. These proposed efforts are based on some problems found when some EFL preservice teachers were having teaching practicum at schools using videos in the context of either offline or online learning situation. For examples, the videos they used were not closely relevant to the materials. Another one was that the videos were not interesting and the quality was not also good.

In fact, the EFL preservice teachers have already created some digital learning videos to fulfill and complete the criteria of this course and uploaded in their own YouTube channels. Thus, it is obviously important to investigate their attitudes and motivations in developing a learning video. There are some preceding studies on the preservice teachers' attitudes and motivations in developing a learning video. (Rohayati & Rachmawati, 2021) implied that students could show their satisfactory improvement in English as well as be aware of digital literacy to support their career after they created videos. This finding is also supported by (Moreno-Guerrero et al., 2020) who inferred that the use of educational videos brings about a better attitude of the students towards the teaching and learning process. In addition, this method benefits to the students as they are provided with skills and competencies in accordance with today's society demands, mainly as teachers. Therefore, students who develop or create videos as their own practical learning and their future career as professional teachers will complement and enhance the traditional teaching methods (Vagg et al., 2020). In line with this, it is essential to investigate EFL preservice teacher's attitudes and motivations in developing a digital learning video, EFL preservice teacher's motivation in developing a digital learning video, and the difficulties found in developing a digital learning video.

Research Method

The research used a mixed method design where there are two data bases kept separate, but related. The data are described and analyzed in the quantitative phase, and then could be used to identify the participants for qualitative data collection and analysis (Creswell, 2018). This research was conducted at the Faculty of Teacher Training and Education, University of Muhammadiyah Prof. Dr. Hamka. There are 67 English Education Department students taken with purposive sampling technique, and they were selected as they

Email: jklppm@undikma.ac.id

attended an ICT in EFL course in the academic year of 2021/2022. The following is the participant demography.

Table 1. Demography of the Participants

Categories		Number of participants (N=67)	Percentage
Gender	Female	53	79
	Male	14	21
Semester	6	38	57
	8	23	34
	10	6	9
Age	20	24	36
	21	25	37
	22	15	22
	Over 23	3	4
Home	Great Jakarta and surroundings	61	91
location	(Bogor, Depok, Tangerang, and		
	Bekasi)		
	Outside Jakarta and surroundings	4	6
	Outside Java Island	2	3

In collecting the data, an online questionnaire was distributed to the students comprising two aspects: measuring the attitudes of the students and their motivations. There are four questions for attitudes domain and four questions for measuring the EFL preservice teachers' motivations with Likert scale from strongly agree (SA), agree (A), disagree (D), and strongly disagree (SD) started from 4-1. Besides the closed-ended questionnaire, two openended questions were also addressed to the EFL preservice teachers dealing with their difficulties in developing digital learning videos. An interview guide was also used to collect the deep information related to the EFL preservice teachers' attitudes and motivations in developing a learning video. There are nine preservice teachers (PT) who were invited for the interviews: PT16, PT18, PT31, PT 41, PT42, PT49, PT50, PT51, and PT58. They were asked some questions related to their attitudes and motivations in developing digital learning videos. Each participant had a 30-minute interview. As this research used a mixed method design, a descriptive statistic was used to analyze the questionnaire data. Meanwhile, a description and image analysis was utilized to analyze the open-ended questions and the interview data (Creswell, 2018).

Results and Discussion

1) EFL Preservice Teachers' Attitudes in Developing A Learning Video

Table 2. Preservice Teachers' Attitudes in Developing a Learning Video

				1 0		0	
Items	SD	D	A	SA	Total	Mean	SD
1. I enjoyed developing videos for my EFL teaching	0%	1%	76%	22%	100%	3.21	0.45
2. I felt comfortable editing my videos	0%	7%	64%	28%	100%	3.21	0.57
3. I prefer making short videos (5-10 minutes) to longer videos for my online learning	1%	9%	58%	31%	100%	3.19	0.66

Email: jklppm@undikma.ac.id

4. I like using more software applications to develop/edit than one software application	0%	15%	54%	31%	100%	3.16	0.67
Total Percentage	0.4%	8.2%	63.1%	28.4%	100%	3.19	0.59
	8.6	6%	91.	4%			

Note: SD for strongly disagree; D for disagree; A for agree; SA for strongly agree

From the table above, there are 76% of the EFL preservice teachers agree to enjoy developing digital learning videos for their own EFL teaching in the future. In addition, 22% of EFL preservice teachers strongly agree and only 1% indicating that they did not enjoy developing digital learning videos. This is in line with what PT31 said in the interview:

"Personally, I got many benefits. For example, by developing videos, I can contribute knowledge and information by online learning until people can understand by repeating the videos".

Related to how they felt comfortable editing their videos, it is found that 64% of the EFL preservice teachers agree and 28% strongly agree to feel comfortable editing their videos. There are only 7% of the EFL preservice teachers who disagree. This finding is supported by PT49 in one interview saying:

"Yes, I like editing especially when I added the effects, images or other features to make my video better including the materials I deliver to attract the students or people to learn from my video".

They also prefer making short video (5-10 minutes) to longer videos for online learning (58%). Meanwhile, there are only 1% who strongly disagree and 9% who disagree. They prefer longer videos (more than 10 minutes) to shorter videos to develop for online learning. This finding is pointed out in the interview:

"I prefer to make the video within 5-10 minutes. I am sure that students will not be bored and the learning will not be monotonous". (PT16)

"I prefer to develop a short video to longer because it is simple in editing dan make the audience easy to understand and not make them bored as well. When I had longer materials, I divided them into some parts of videos". (PT18)

Most EFL preservice teachers like using more software applications to develop or edit the videos (54%). 15% of EFL preservice teachers tend to use one software application. Similarly, some argue that:

"I used more than one application to make my videos more interesting and look better". (PT42)

"I usually use more than one application, and this depends on my needs to develop a learning video. Sometimes I used Inshot, and sometimes I used Kinemaster to edit". (PT51)

"I use more applications so that the audience will not be bored". (PT58)

From the data collected, there are 14 kinds of software applications used by EFL preservice teachers in creating and editing the videos, namely: Powerpoint (PPT), Bandicam, Sparkol/Videoscribe, Adobe Premiere, Kinemaster, Inshot, PowerDirector, Capcut, VN, Filmora, Canva, Prezi, Audacity, and Storyboard That (see Chart 1). Most EFL preservice teachers used Powerpoint to develop learning videos (26%), Sparkol (12%) and Bandicam

Email: jklppm@undikma.ac.id

(8%). For editing the videos, the EFL preservice teachers dominantly used Inshot (21%) and Kinemaster (19%). From the interview, it could be described:

- "I used mostly PPT and Inshot. I think making the video with PPT is easier and PPT contains audio and images". (PT16)
- "Mostly I use Inshot. It is easier, understandable and has no watermark". (PT49)
- "So far, I use Kinemaster because I can operate it very well. The result of editing is also nice". (PT18)

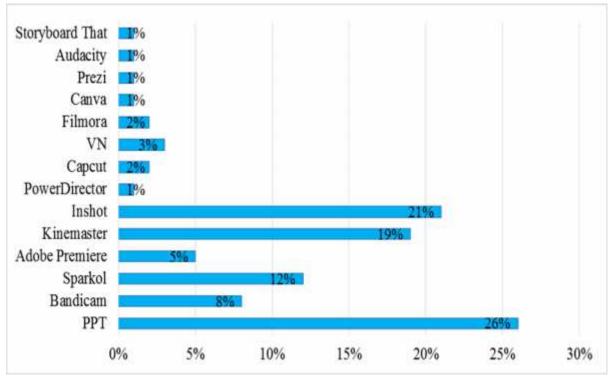


Chart 1. The Application Used by the EFL Preservice Teachers to Develop and Edit Learning Videos

Based on the results above, it is found that the mean of the EFL preservice teachers' responses related to their attitudes in developing a digital learning video from the 4 items ranges between 3.16 and 3.21 and total percentage yields 91.4%. This indicates that there is a stronger level of their attitudes in developing a learning video. It is in line with what has been done by (Graziano, 2018). He reported that after the students studied seven kinds of technology in the course, they could create the activities such as telling the stories, explaining how to solve the problem, delivering instructions, and using the technology with English. Another relevant study showed that teachers who were able to edit the video allowed them to implement a host of multimedia design principles more easily and it could be more interactive now (Lowenthal et al., 2020; Noetel et al., 2021). They prefer to make shorter videos, and this is supported by Martin and Martin in (Campbell & Cox, 2018) who found that students do not watch videos on academic tutorials over 3 minutes in length and with a duration of short videos students are not easily bored and are more effective as they contains some examples and explanations which are easy to understand (Handayani et al., 2021). In contrast to the study done by (Gentile, 2019), there were 36.36% of respondents who never tried to provide their instructional videos because of financial reasons and operational ones.

Email: jklppm@undikma.ac.id

2) EFL Preservice Teachers' Motivation in Developing A Digital Learning Video Table 3. EFL Preservice Teachers' Motivations in Developing a Learning Video

				1 0		0	
Items	SD	D	\mathbf{A}	SA	Total	Mean	SD
I will use English to make more videos for my future own teaching	0%	3%	70%	27%	100%	3.24	0.5
2. I will upload/share my videos in my YouTube channel or other social media	1%	9%	70%	19%	100%	3.12	0.54
3. I will use my videos for online learning	0%	6%	72%	22%	100%	3.16	0.51
4. When I make a video, my ICT skills will increase	1%	0%	60%	39%	100%	3.36	0.57
Total Percentage	0.7% 5.2	4.5%	67.9% 94.8	26.9% 8%	100%	3.22	0.53

Note: SD for strongly disagree; D for disagree; A for agree; SA for strongly agree

Table 3 shows that EFL preservice teachers are motivated to use English language to make videos for their future own teaching of (70%). In addition, there are 27% of EFL preservice teachers who strongly agree to use English to make videos rather than Indonesian language. There are only 3% of EFL preservice teachers who disagree to use English to develop digital learning videos. This result is supported by PT18:

"In the future I will be using English in creating my videos as people can learn and practice more about English materials as well as to increase my speaking skills".

The videos which they already created are then uploaded or shared to their YouTube channel or other social media (89%). There are only 10% who would not upload their videos to the YouTube channel or other social media. PT50 supports this finding below:

"I own more than 5 videos, and I have already uploaded them in my YouTube channel for my future teaching of English. In short time, I will be joining the teaching practice program and will let the students watch my videos".

Most EFL preservice teachers also will use their own videos for online learning in the future (72%). In addition, 22% strongly agree to use the videos for online learning. There are only 6% who disagree. PT41 strengthens this idea:

"Yes, the video I have is used for online learning to make the students able to repeat the materials they do not understand".

Dealing with whether their ICT skills will increase when making a video, 60% of EFL preservice teachers agree and 39% strongly agree that their ICT skills will improve when they create learning videos. This finding is revealed with these interview results.

"Yes, My ICT skills increase because previously I made the video without being edited, but now after I joined ICT in TEFL I could edit the video by adding the images, the texts, effects, sounds, and so on to be better". (PT49)

"Since I joined ICT in TEFL, I know more about technology and how to make and edit the video as well as I can practice it". (PT58)

Email: jklppm@undikma.ac.id

In line with these results, the mean of EFL preservice teachers' responses ranges from 3.12 to 3.36 and total percentage shows 94.8%. This indicates that there is a stronger level of preservice teachers' motivations in developing digital learning videos. This finding is similar to what (Calderón et al., 2020) did in their research on the relationship between the studentcentered digital technology approach and intrinsic motivation describing that the use of ICT in developing videos was a new learning experience to most preservice teachers and they were initially affirmative towards using digital technology for educational goals. Another research showed that the instructional video developed by preservice teachers had a good quality (Susantini et al., 2020) and this could be utilized for their EFL teaching and improving teaching skills of preservice teachers as quoted by Susantini in (Susantini et al., 2020). The videos they have produced are then uploaded to their own YouTube channel as they believe that during the online learning YouTube can be a good material for them to teach English and this helps students understand the lesson better (Syafiq et al., 2021) and use the pause button when they find the material in the video too difficult (Merkt et al., 2022). This idea is also supported by (van Alten et al., 2020) in their research who interpret that students deliberately watched the learning videos to understand the material.

3) EFL Preservice Teachers' Difficulties in Developing A Digital Learning Video

From the data collected, there are five categories of difficulties in developing a learning video, they are: (1) skills of using applications, (2) providing materials, (3) software capability, (4) confidence, and (5) availability of time.

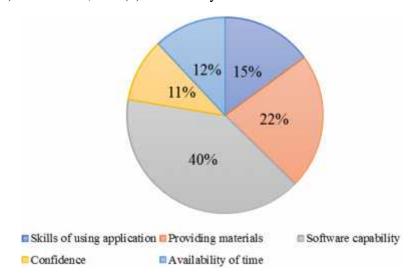


Chart 2. Categories of Difficulties in Developing a Digital Learning Video

Chart 2 displays that the most difficulty deals with the software capability (40%). The second problem the EFL preservice students face is about how they provide the materials (22%). They are confused to select the topic of the material. Meanwhile, there are 11% of EFL preservice teachers who still lack their own confidence, and this is the least difficulty found from the EFL preservice teachers' responses. In this case, they feel shy to speak in front of the camera. The other difficulties belong to the skills of using application (15%) and availability of time (12%).

The results above present some difficulties found in developing a digital learning video as already mentioned, there are five categories. Several problems on the skills of using applications are related to how the preservice teachers intend to record and edit the video. They are not good enough or skillful at using the application. There are some certain features

Email: jklppm@undikma.ac.id

of the application they do not understand. They need to practice more to use the application. These problems deal with ICT skills owned by EFL preservice teachers. In the beginning of developing digital learning videos, it is obviously that EFL preservice teachers were not assertive to apply some applications. Similarly, (Valtonen et al., 2021) stated that preservice teachers did not seem to be confident in using ICT in education to integrate with pedagogical knowledge.

In developing a digital learning video, EFL preservice teachers also have problems in providing materials. They are confused to decide the theme or the plot of the video. They are not sure about delivering the material correctly if it suits the students' needs for their teaching. Another difficulty is about finding the references of the materials. They also need to master the materials, and this is not easy for them to speak in front of the camera. This category is in line with what (Önal, 2019) found in his research. He said that the material or the content of activity should consider the level, ages, interests and needs of the students in designing their lesson plans.

In the category of software capability, preservice teachers find the Adobe Premiere Pro does not support their laptops. It takes a lot of time to edit as well as to render the video. For those who use smart phones for editing, the memory capacity is not adequate to accommodate. As the application downloaded for free, the menus are limited and contain the water mark. Sometimes the videos are corrupted after editing and they need to make another new video. In addition, the software application could not be opened. These hindrances are similar to what (Theelen et al., 2019) studied where the preservice teachers had physical discomfort and technical problems.

Another category of developing the learning videos which is mostly faced by more EFL preservice teachers is their confidence. They are hard to choose the right words or expressions to convey to the public. They are worried if the materials presented are interesting. They also lack creativity and confidence talking in front of the camera. Sometimes they are nervous and shy how to make good explanations so as that the audience understands the materials (Fidan, 2018).

The last one is the availability of time. This includes EFL preservice teachers' unavailability of creating and editing the video as it is not easy to make the videos have aesthetic. Moreover, it takes patience and needs lot of time to create or develop learning videos. They have been busy with other activities in the same time.

Conclusion

This research has shown positively that most EFL preservice teachers are enjoyable and strongly eager to develop digital learning videos with some kinds of video editing applications as they need to use the videos for their future teaching at schools. However, they find some obstacles when attempting to create the videos such as skills of using applications, providing materials, software capability, confidence, and availability of time. In addition, the videos they already created through ICT in TEFL course and the practices can increase their ICT skills.

Recommendation

It is recommended that the EFL preservice teachers need to continuously improve their skills of ICT in developing more digital learning videos for EFL teaching in the future better such as joining some workshops on ICT in TEFL, watching some tutorials of creating and editing videos via YouTube, and practicing to conveniently use a video maker and editor. Besides improving the ICT skills, they also should master the materials or the contents since it is the

Email: jklppm@undikma.ac.id

important part of developing videos more interestingly and this is supported with good confidence.

References

- Adriani, D., Lubis, P. K. D., & Triono, M. A. A. (2021). Development of Digital Learning Video Based on the Cyberlink Power Director Program in the Era of Learning Freedom in Education Economics Courses. 6th Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2021), 804–808.
- Atilboz, N. G. (2021). Enhancing Preservice Teachers' Understanding of Circulation System Concepts, Attitude and Motivation. *Uluslararası E itim Ara tırmacıları Dergisi*, 0–2. https://doi.org/10.52134/ueader.989718
- Atmojo, A. E. P. (2021). EFL teachers' online teacher professional development experiences amidst the COVID-19 pandemic: Practices and perceptions. *Englisia: Journal of Language, Education, and Humanities*, 9(1), 1. https://doi.org/10.22373/ej.v9i1.9127
- Calderón, A., Meroño, L., & MacPhail, A. (2020). A student-centred digital technology approach: The relationship between intrinsic motivation, learning climate and academic achievement of physical education pre-service teachers. *European Physical Education Review*, 26(1), 241–262. https://doi.org/10.1177/1356336X19850852
- Campbell, L. O., & Cox, T. (2018). Digital Video as a Personalized Learning Assignment: A Qualitative Study of Student Authored Video using the ICSDR Model. *Journal of the Scholarship of Teaching and Learning*, 18(1), 11–24. https://doi.org/10.14434/josotl.v18i1.21027
- Creswell, J. W. C. J. D. (2018). Research design: qualitative, quantitative, and mixed methods approaches. In *Sage* (5th ed., Vol. 53, Issue 9). Sage. http://www.elsevier.com/locate/scp
- Dahliana, S. (2019). Students' Motivation and Responsive Pedagogy in Language Classroom. *Englisia Journal*, 6(2), 75. https://doi.org/10.22373/ej.v6i2.4601
- Deesomsak, R., Paudyal, K., & Pescetto, G. (2013). Durham Research Online EXCEPTIONALLY. *Language Learning Journal*, 41(3), 251–253. http://dx.doi.org/10.1037/xge0000076
- Fidan, M. (2018). The Usage of Video Blog (vlog) in the "School Experience" Course: The Opinions of the Pre-service Teachers. *Journal of Education and Future*, 13, 161–177.
- Gentile, M. (2019). *Digital Videos and Teacher Education: A Research-Training Framework* (Issue June). 14th conference reader, Prague: Center for Higher Education Studies.
- Graziano, K. J. (2018). Preservice Teachers' Comfort Levels with Technology in an Online Standalone Educational Technology Course. *Journal of Teaching and Learning with Technology*, 7(1), 70–86. https://doi.org/10.14434/jotlt.v7i1.23492
- Guido, R. M. D. (2018). Attitude and Motivation towards Learning Physics. 2(11), 2087–2094. http://arxiv.org/abs/1805.02293
- Handayani, E. U., Utami, R. L., & Tamsil, I. M. (2021). How to Create Effective and Efficient Na wu Media with Short Videos Based on the Camtasia Application? In *ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, dan Budaya Arab* (Vol. 4, Issue 1, pp. 15–28). https://doi.org/10.17509/alsuniyat.v4i1.29232
- Hashim, H. (2018). Application of Technology in the Digital Era Education. *International Journal of Research in Counseling and Education*, 1(2), 1. https://doi.org/10.24036/002za0002
- Laksmi, N.K.P, Yasa, I.K.A, Mirayani, K. A. M. (2021). the Use of Animation Video As Learning Media for Young. *Universitas Pendidikan Ganesha*, 42–52.

Email: jklppm@undikma.ac.id

- Lowenthal, P. R., Borup, J., West, R. E., & Archambaullt, L. (2020). Thinking Beyond Zoom: Using Asynchronous Video to Maintain Connection and Engagement During the COVID-19 Pandemic. *Elite English and Literature Journal*, 28(2), 383–391. https://doi.org/10.24252/elite.v7i1a6
- Maru, M. G., Nur, S., & Lengkoan, F. (2020). Applying video for writing descriptive text in senior high school in the covid-19 pandemic transition. *International Journal of Language Education*, 4(3), 408–419. https://doi.org/10.26858/ijole.v4i3.14901
- Merkt, M., Hoppe, A., Bruns, G., Ewerth, R., & Huff, M. (2022). Pushing the button: Why do learners pause online videos? *Computers and Education*, *176*(October 2021), 104355. https://doi.org/10.1016/j.compedu.2021.104355
- Moreno-Guerrero, A. J., Rodríguez-Jiménez, C., Gómez-García, G., & Navas-Parejo, M. R. (2020). Educational innovation in higher education: Use of role playing and educational video in future teachers' training. *Sustainability (Switzerland)*, *12*(6). https://doi.org/10.3390/su12062558
- Mu'min, U. A. (2019). Peran Teknologi Informasi dalam Bidang Pendidikan (E-education). *Al-Afkar, Journal for Islamic Studies*, 2(1), 104–119. https://doi.org/10.31219/osf.io/ycfa2
- Mulhayatiah, D., Sinaga, P., Rusdiana, D., Kaniawati, I., & Suhendi, H. Y. (2021). Pedagogical and professional physics teacher training: Why hybrid learning is important? *Journal of Physics: Conference Series*, 1806(1), 0–6. https://doi.org/10.1088/1742-6596/1806/1/012036
- Noetel, M., Griffith, S., Delaney, O., Sanders, T., Parker, P., del Pozo Cruz, B., & Lonsdale, C. (2021). Video Improves Learning in Higher Education: A Systematic Review. In *Review of Educational Research* (Vol. 91, Issue 2). https://doi.org/10.3102/0034654321990713
- Önal, A. (2019). An exploratory study on pre-service teachers' reflective reports of their video-recorded microteaching. *Journal of Language and Linguistic Studies*, 15(3), 806–830. https://doi.org/10.17263/jlls.631520
- Patricia Aguilera-Hermida, A. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*, *I*(July), 100011. https://doi.org/10.1016/j.ijedro.2020.100011
- Pokhrel, S., & Chhetri, R. (2021). A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning. *Higher Education for the Future*, 8(1), 133–141. https://doi.org/10.1177/2347631120983481
- Prastikawati, E. F. (2021). Pre-service EFL teachers' perception on technology-based formative assessment in their teaching practicum. *ELT Forum: Journal of English Language Teaching*, 10(2), 163–171. https://doi.org/10.15294/elt.v10i2.47965
- Raja, R., & Nagasubramani, P. C. (2018). Impact of modern technology in education. *Journal of Applied and Advanced Research*, S33–S35. https://doi.org/10.21839/jaar.2018.v3is1.165
- Rohayati, D., & Rachmawati, E. (2021). The Impacts of Creating Youtube Video Project to Facilitate Students' Critical Thinking. *ENGLISH REVIEW: Journal of English Education*, 9(2), 323–332. https://journal.uniku.ac.id/index.php/ERJEE/article/view/4360/2569
- Saed, H. A., Haider, A. S., Al-Salman, S., & Hussein, R. F. (2021). The use of YouTube in developing the speaking skills of Jordanian EFL university students. *Heliyon*, 7(7), e07543. https://doi.org/10.1016/j.heliyon.2021.e07543

Email: jklppm@undikma.ac.id

- Susantini, E., Indana, S., Isnawati, I., & Sayitri, S. D. (2020). *Developing Instructional Video to EnhanceBiology Pre-Service Teachers' Metacognitive Skills*. 95(Miseic), 147–150. https://doi.org/10.2991/miseic-19.2019.35
- Syafiq, A. N., Rahmawati, A., Anwari, A., & Oktaviana, T. (2021). Increasing Speaking Skill through YouTube Video as English Learning Material during Online Learning in Pandemic Covid-19. *Elsya: Journal of English Language Studies*, *3*(1), 50–55. https://doi.org/10.31849/elsya.v3i1.6206
- Theelen, H., van den Beemt, A., & den Brok, P. (2019). Using 360-degree videos in teacher education to improve preservice teachers' professional interpersonal vision. *Journal of Computer Assisted Learning*, 35(5), 582–594. https://doi.org/10.1111/jcal.12361
- Vagg, T., Balta, J. Y., Bolger, A., & Lone, M. (2020). Multimedia in Education: What do the Students Think? *Health Professions Education*, 6(3), 325–333. https://doi.org/10.1016/j.hpe.2020.04.011
- Valtonen, T., Hoang, N., Sointu, E., Näykki, P., Virtanen, A., Pöysä-Tarhonen, J., Häkkinen, P., Järvelä, S., Mäkitalo, K., & Kukkonen, J. (2021). How pre-service teachers perceive their 21st-century skills and dispositions: A longitudinal perspective. *Computers in Human Behavior*, 116(November 2020), 1–9. https://doi.org/10.1016/j.chb.2020.106643
- van Alten, D. C. D., Phielix, C., Janssen, J., & Kester, L. (2020). Self-regulated learning support in flipped learning videos enhances learning outcomes. *Computers and Education*, *158*(July), 104000. https://doi.org/10.1016/j.compedu.2020.104000
- Wijaya, T. T., Ying, Z., Purnama, A., & Hermita, N. (2020). Indonesian students' learning attitude towards online learning during the coronavirus pandemic. *Psychology, Evaluation, and Technology in Educational Research*, *3*(1), 17–25. https://doi.org/10.33292/petier.v3i1.56