Increase Student Activity Through The Use of Interactive Learning Videos in Civics Learning during the Study From Home

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A B S T R A K

Proses pembelajaran PPKn sebaiknya harus dilaksanakan secara interaktif dengan memilih media yang dapat merangsang peserta didik aktif dalam menyelesaikan masalah kontekstual. Namun yang menjadi masalah, proses belajar belum terpusat pada peserta didik. Tujuan penelitian ini adalah melakukan analisis kebutuhan untuk mengembangkan video pembelajaran interaktif mata pelajaran PPKn. Penelitian ini dilakukan dengan metode R&D (Research & Development). Subjek penelitian Peserta Didik kelas XI yang berjumlah 36 peserta didik. Metode pengumpulan data dengan observasi, wawancara, dan tes. Teknik analisis data menggunakan analisis kuantitatif dan kualitatif. Hasil penelitian menunjukkan dalam proses pembelajaran dari rumah, peserta didik menginginkan media berupa video pembelajaran interaktif. Video pembelajaran interaktif dapat digunakan untuk proses pembelajaran yang lebih terpusat pada peserta didik karena di dalamnya terdapat pertanyaan. Pertanyaan yang disematkan dalam video pembelajaran tersebut diharapkan dapat membuat peserta didik aktif dalam menyimak dan menjawab mengenai materi pembelajaran. Dari hasil analisis disimpulkan bahwa video pembelajaran interaktif dibutuhkan untuk membantu proses pembelajaran lebih terpusat pada peserta didik sehingga dapat memberikan dampak positif khususnya dalam menciptakan proses pembelajaran interaktif.

A B S T R A C T

The Civics learning process should be carried out interactively by choosing media to actively stimulate students to solve contextual problems. But the problem is that the learning process must focus on students. This study aimed to conduct a needs analysis to develop interactive learning videos for Civics subjects. This research was conducted using the R&D (Research & Development) method. The research subjects were eleventh-grade students, totaling 36 students—data collection methods by observation, interviews, and tests. In learning from home, students want media in the form of interactive learning videos. Interactive learning videos can be used for a more learner-centered learning process because they contain questions. The questions in the learning video are expected to make students actively listen and answer the learning material. From the analysis results, it was concluded that interactive learning videos are needed to help the learning process be more student-centered to have a positive impact, especially in creating an interactive learning process.

1. INTRODUCTION

Education during the Covid-19 pandemic was changing, especially when the learning process that was previously face-to-face turned online. It provides a change in learning activities. Learning activities are also carried out remotely, namely learning from home. The impact of this, teachers are required to be able to teach online (Mastura & Rustan Santaria, 2020; Szarpak et al., 2020). In addition, teachers must also have knowledge and skills in using technology as a learning medium. The use of technology in learning activities has an important role in improving the quality of learning that is more effective and efficient (Japar et al., 2021; Rapanta et al., 2020; Salmia & Yusri, 2021). In the learning process, students are subjects who can actively seek, process, construct, and use knowledge (Ariandi, 2016; Purnamasari et al., 2020). Student activity can be seen in various things, such as seeking information, asking questions, and expressing opinions (Hafida, 2020; Sipayung, 2020). Even through the implementation of learning from home, students must also remain active, especially in Civics subjects. Students are expected to have the ability to participate actively and responsibly and act intelligently, critically, and creatively in community activities (Yuniwati & Masruri, 2016). It is challenging for teachers to create an active and effective learning process using technology while studying from home. But in the world of education

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today, students are less encouraged to develop thinking skills in the learning process. In the classroom, students are only directed to memorize information. Students become accustomed to remembering and hoarding information obtained without trying to relate what is remembered to everyday life (Santi et al., 2020). Based on observations, teachers still use non-interactive media so that the learning process is still student-centered. One of the media that teachers often use is PowerPoint and learning videos from YouTube (Andriani & -, 2016; Widhayanti & Abduh, 2021). This media is given to students or explained by teachers through the Google Classroom platform. But the problem is that the learning process becomes one-way because students passively listen to the teacher's explanation. If the teacher only provides material through Powerpoint and learning videos, it cannot be ensured that students see and listen to the material independently. If the learning process is left like that, it will have an unfavorable impact on students. They will feel bored and bored. The learning process has become meaningless, especially during this pandemic, which changed the learning process to online and not face-to-face, which caused teachers to rely heavily on the media to explain teaching material. Innovation in the teacher's media will make it easier for students to understand the material. It is evidenced in the observations made. As much as 69.2%, with a total of 164 students, felt confused during the learning process from home because they had to study on their own, 25.7%, with a total of 61 students, felt that the material presented was not clear and 5.1% with a total of 12 students felt that during learning from home is quite good because you can learn by yourself.

The solution to overcome this problem, there must be intervention in overcoming it. One of the interventions is through the media because the media can influence the motivation, communication, and interaction of student learning to be more responsive and interactive in learning activities in class (Djannah et al., 2021; Stellmacher et al., 2020). With the existence of learning media, the teaching and learning process becomes easy and interesting so that students can understand and understand the lesson easily. Student learning efficiency can be increased according to the learning objectives (Alexander et al., 2020; Moè et al., 2018). It helps students concentrate on learning because the learning media is interesting and increases learning motivation according to students' needs. Students' attention to lessons can increase, providing a thorough learning experience. So that students can understand clearly the material provided better understand the material as a whole, students are involved in the learning process. Students actively follow and are involved in the learning process, and students have the opportunity to be creative and develop their potential (Lestari, 2018; Nurrita, 2018).

One of the appropriate learning media is interactive. Interactive classification within the scope of learning multimedia does not lie in hardware systems but refers to student learning characteristics in responding to stimuli displayed on a computer monitor screen (Jampel & Sudatha, 2018; Rahmadi et al., 2018). Interactive learning media is deemed necessary, considering the advantages of interactive learning media can interact more broadly. Learning also becomes more personal, which will meet the needs of different learning strategies (Dafit et al., 2018; Zainuddin et al., 2019). The interactive concept of learning with computer media generally follows three elements: adjustable instructional sequences, student work answers or responses, and adjustable feedback (Azhar Arsyad, 2011). Interactive learning media is multimedia equipped with a controller that can be operated by the user so that the user can choose what he wants for the next process (Daryanto, 2013; W. P. Wardani & Suniasih, 2022; Yuniati & Rohmadheny, 2020).

The interactive learning media that will be used in this Civics subject is an interactive learning video. Interactive videos are specially designed as an effective learning medium. Contains practical guidance that is right on target, presented through audio-visual presentations (images and sound) equipped with a clear and easy-to-understand Indonesian voice guide and packaged in an autorun program (Aryani & Ambara, 2021; Yasa, Ariawan, 2017). Interactive videos, in this case, videos, are to provoke students during learning. Students will respond to what they see and hear so that messages from the content of the material contained in the video will be constructed by the students' brains and cause feedback in the form of questions about learning material which will create interaction between students (Sungkono, 2008). Previous research findings state that interactive multimedia based on Adobe Flash CS6 effectively improve learning outcomes (Muthoharoh & Sakti, 2021; Susilawati, 2018). Respond and positive student activity towards interactive media in learning (Putri & Amal, 2019; Qosyim & Priyonggo, 2018). Interactive learning media increases participation and student learning outcomes (Putrantana et al., 2020; Saskia & Arief, 2020). Based on this, interactive learning videos are considered effective in achieving learning objectives because students can observe various cases simultaneously, and the learning process is also considered effective. This study analyzes the need to develop interactive learning videos for Civics subjects.

2. METHODS

The research conducted is a type of research and development or Research and Development (R&D). The development stage of interactive learning videos on Civics Subjects uses the development procedure described in the Bergman and Moore Model. The Bergman and Moore model is specifically used to guide and manage interactive video and multimedia production (Tegeh et al., 2014). The Bergman and Moore model contains six main activities: analysis, design, development, production, integration, and validation. Each step has three parts, namely input, output, and evaluation. The output of each step serves as input for the next step. This research was conducted at SMA Negeri 100 Jakarta. This research targeted the eleventh grade of 36 students, 14 boys and 22 girls. Data was collected through a questionnaire to eleventh-grade students of SMA. The analysis carried out is regarding the constraints experienced by students in the learning process, the needs needed in Civics learning, the learning media often used in Civics subjects, and the characteristics of students. The data collection technique used in this study was to use questionnaires. The instrument used in this study was a questionnaire that was used to assess the quality of the products that had been made. The questionnaire will be presented on a Likert scale, with a value range of 1-4, where 4 is the highest score. These values will later be processed into average values, and the results will be translated into descriptive conclusions. The instrument uses a standard instrument, so the validity test is not carried out—data analysis techniques using quantitative and qualitative analysis. The research instrument grid is presented in Table 1.

Table 1. Expert Instruments

No	Aspect	Indicator	Question Number
1	Media	The attractiveness of the opening view	1
		The systematics of the content is easy to understand	2
		Visual or image sharpness	3
		Visual or image suitability with the material	4
		Clarity of captions	5
		Font size suitability	6
		The color contrast of the letters against the background	7
		The accuracy of the use of illustrations	8
		Appropriateness of the displayed layout	9
		Presentation attractiveness	10
		The accuracy of the use of music	11
		The accuracy of the presenter's performance	12
		Player suitability	13
		Player suitability	14
		Narrative accuracy	15
		Narrative accuracy	16
		The accuracy of the use of language and dialogue	17
		The accuracy of the use of language and dialogue	18
		Adequacy of program duration	19
2	Instructional	Program content is based on a particular learning theory	1
		Suitability of the delivery strategy with the target characteristics	2
		The accuracy of the delivery strategy	3
		Appropriateness of the contents of the interactive learning video program	4
		The accuracy of the order of learning materials	5
		The storyline encourages critical thinking targets	6
		The linkage of interactive learning video programs with real-life applications	7
3	Material	The truth of the information submitted	1
		Free from conceptual errors	2
		Compatibility with the applicable curriculum	3
		Suitability of learning objectives	4
		Clarity of learning objectives	5

No	Aspect	Indicator	Question Number
		The depth of learning material in interactive learning video programs	6
		The clarity of the examples shown in the interactive learning video program	7
		The adequacy of the references used	**8**

3. RESULT AND DISCUSSION

Results

The characteristics of students aged 16 to 17 years, in the learning process, they have no problems using gadgets because each student already has a smartphone. The learning that students want to understand the material during Civics learning is presented in Table 2.

Table 2. Learning Media Chosen by Students to Understand The Material

No	Statement	Percentage
1	Understanding the material through PowerPoint media	8.8%
2	Understanding the material through recorded video explanations from the teacher	7.5%
3	Understanding material through learning videos	32.6%
4	Understanding the material through learning videos that contain practice questions in them	51.1%

Based on Table 2, most students, with a percentage of 51.1%, want to learn media through videos with practice questions. Develop interactive learning videos, which are not just videos but also contain questions as practice questions in them. The initial stage in making this interactive video is divided into problem analysis, target analysis, task analysis, and environmental analysis. This analysis shows that the Covid-19 pandemic has resulted in learning activities at SMA Negeri 100 being carried out online, namely learning from home, so teachers must prepare for a distance learning process. Based on the results of interviews with teachers at SMA Negeri 100 Jakarta, it is recommended to make interactive learning videos on material regarding the threat of the Unitary State of the Republic of Indonesia in various fields. This material is considered difficult by students because the explanations in the book are more written than pictures, so they need media that can explain more visually, such as examples of threat material in the field of defense, for example, acts of terrorism, students can't observe the incident directly, so a video is needed. The second stage is designing the Outline of Media Content and Material Description to design the content, how the various video pieces are selected, the language to be used, and what other elements are presented in visual form in the learning videos. It is decided based on the data obtained from the analysis stage. The third stage is the development by changing the draft Media Content Outline into a storyboard form containing a visual design, namely the application display plan, content on one application page, and both writing and supporting media. The fourth stage is production. The storyboard is then produced by downloading all videos and voice nets that match the storyboard through the safefrom.net site, then cutting the video according to the narration in the storyboard. Video snippets using the Camtasia application are presented in Figure 1.
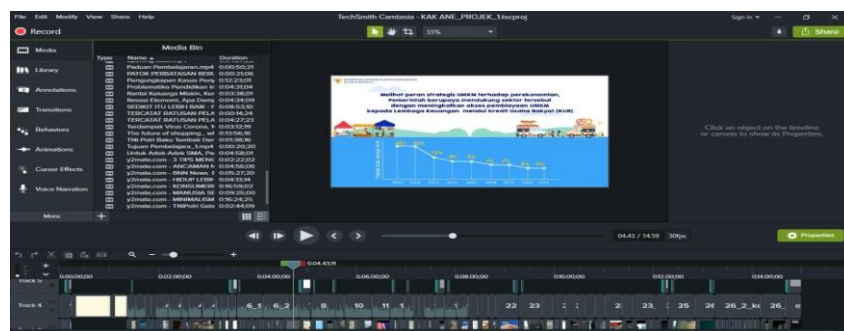

Figure 1. Video Snippets Using the Camtasia Application

The fifth stage is merging, combining all learning objects through the Edpuzzle platform. This activity includes uploading videos that have been made and adding interactive elements in the form of questions in the videos. An example of the output of a video product that has included questions in Edpuzzle is presented in Figure 2.
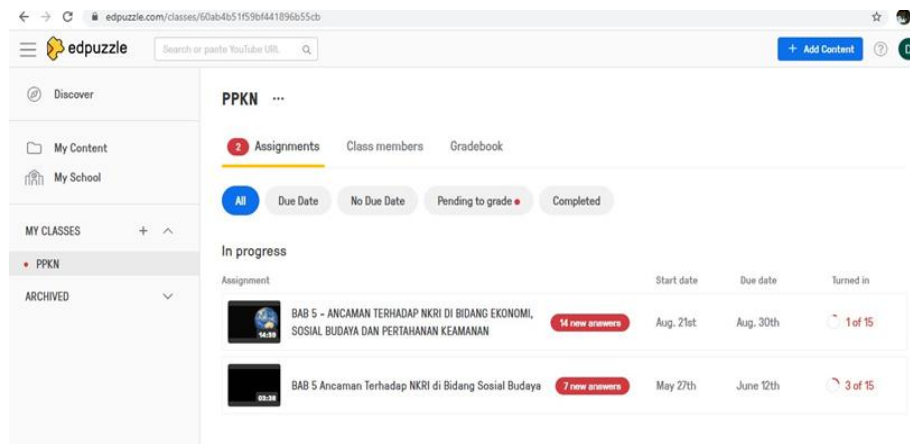

Figure 2. Example of the Output of A Video Production That Has Included Questions in Edpuzzle

The sixth stage is validating the finished product by preparing standard instruments for expert and user trials. Expert trials were conducted with 3 (three) experts: material experts, learning design experts, and media experts. The user trials were conducted to get user reactions or responses regarding this learning application. This trial was conducted in one-to-one, small group review and field trials. This field trial has two objectives, the first is to assess the media itself, and the second is to assess user learning outcomes. The results of expert trials show that the developed media is valid in terms of learning media theory, instructional design, and the material presented. Then, user trials show that the media developed is practical and effective for improving student learning outcomes.

Discussion

Based on the research results, interactive learning videos for Civics subjects. Characteristics of eleventh-grade high school students aged 16-17 years at SMA Negeri 100 Jakarta while online learning is facilitated by smartphones so that they can take advantage of these gadgets to learn from home. In learning from home, students want media in the form of interactive learning videos. Interactive learning videos can be used for a more learner-centered learning process because they contain questions (Eryani, 2021; R. K. Wardani & Syofyan, 2018). The questions in the learning video are expected to make students actively listen and answer the learning material. In this case, interactive videos lure students during learning (Colasante & Douglas, 2016; Rahayu et al., 2021). This interactive learning video is needed to help facilitate learning activities so that it can have a positive impact, especially in creating an active learning process so that it can increase eleventh-grade students' understanding of threats to the Unitary State of the Republic of Indonesia in Civics subjects at SMA Negeri 100 Jakarta.

This interactive learning video is accessed online via a web browser if using a laptop. Those who access it with a gadget or smartphone must download the Edpuzzle for Student application. This interactive learning video consists of the main view, instructions for using videos in learning, learning objectives, and material and conclusions. The video snippets used in this product are selections from the YouTube site adapted to the selected learning material. After every discussion of the material is finished, there are always questions. Students must wait to continue watching the video before answering the question. Interactive learning videos effectively achieve learning objectives because students can observe various cases simultaneously. Then the learning process is also considered effective because students can actively provide solutions to several threats that occur through questions inserted in the video (Styowati & Utami, 2022; Tegeh et al., 2019). Students actively interact with the learning video media from this activity by answering the questions provided. The teacher can also see how often students actively watch videos and answer questions. Students are also very helpful in learning because they can repeat the material shown several times. If they don't understand, they can repeat and answer the questions again until they understand. This interactive learning video is needed to help the learning process be more student-centered to create an active learning process.

This finding is reinforced by previous studies stating that interactive multimedia based on Adobe Flash CS6 effectively improve learning outcomes (Muthoharoh & Sakti, 2021; Susilawati, 2018). Respond and positive student activity towards interactive media in learning (Putri & Amal, 2019; Qosyim & Priyonggo, 2018). Interactive learning media increases participation and student learning outcomes (Putrantana et al., 2020; Saskia & Arief, 2020). From the discussion, online interactive learning videos using the EDpuzzle program. The EDpuzzle quiz tool allows instructors to insert one or more multiple-choice, true or false, or open-ended quizzes or written comments into videos, and students must answer the questions asked or read the comments before continuing with the video. This media can be accessed online via a laptop platform or in the form of an application that can be downloaded via the Play Store/app store. It means that the application can be used anywhere if it is run on a smartphone or PC. This research implies that interactive video media can be used to improve the quality of learning.

4. CONCLUSION

This interactive learning video is needed to help facilitate learning activities to impact positively, especially in creating an active learning process that can increase eleventh-grade students' understanding of threats to the Unitary State of the Republic of Indonesia in Civics subjects. This research implies that interactive video media can be used to improve the quality of learning.

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