Journal of Educational Research and Evaluation
Volume 8, Issue 2, 2024, pp. 214-222
P-ISSN: 2597-422x E-ISSN: 2549-2675
Open Access: https://doi.org/10.23887/jere.v8i2.66675

Interactive Media Based on Adobe Animate CC Increases Student Participation in History Learning

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ARTICLE INFO

Article history:
Received July 30, 2023
Accepted January 20, 2024
Available online May 25, 2024

Kata Kunci :
Media Interaktif, Adobe Animate CC, Partisipasi Siswa, Pembelajaran Sejarah.

Keywords:
Interactive Media, Adobe Animate CC, Student Participation, History Learning.

ABSTRAK

Dalam proses pembelajaran guru masih menggunakan metode ceramah dan diskusi. Selain itu kurangnya bahan ajar berbasis multimedia yang digunakan mempengaruhi tingkat partisipasi siswa. Hal ini berdampak pada hasil belajar siswa yang rendah. Penelitian ini bertujuan untuk menganalisis Pengaruh Penggunaan Media Interaktif Berbasis Adobe Animate CC Terhadap Partisipasi Siswa Dalam Pembelajaran Sejarah. Penelitian ini merupakan penelitian kuantitatif dengan pendekatan deskriptif analisis berbantuan SPSS. Populasi dalam penelitian ini adalah siswa kelas XI-1, XI-2 dan XI-3 yang berjumlah 97 siswa dan seluruh populasi tersebut dijadikan sampel dalam penelitian ini. Teknik pengumpulan data dalam penelitian ini melalui angket, observasi, dokumentasi, dan tes. Instrumen pengumpulan data berupa lembar kuesioner. Teknik analisis data menggunakan analisis statistik inferensial. Hasil penelitian ini menunjukkan bahwa variabel penggunaan media interaktif berbasis Adobe Animate CC mempunyai pengaruh yang signifikan terhadap variabel partisipasi siswa dalam pembelajaran sejarah. Hasil utama penelitian ini membuktikan penggunaan media interaktif Adobe Animate CC sangat cocok untuk diterapkan guru secara terus menerus dalam pembelajaran sejarah karena dapat memberikan dampak yang baik bagi siswa, sehingga dapat meningkatkan partisipasi siswa dalam pembelajaran. Implikasi penelitian yaitu penggunaan media interaktif ini dapat meningkatkan minat dan motivasi siswa dalam belajar sejarah, mengubah pembelajaran yang sering dianggap membosankan menjadi pengalaman yang lebih menarik dan interaktif.

ABSTRACT

In the learning process, teachers still use lecture and discussion methods. Apart from that, the lack of multimedia-based teaching materials affects the level of student participation. This has an impact on low student learning outcomes. This research aims to analyze the influence of using interactive media based on Adobe Animate CC on student participation in history learning. This research is quantitative research with a descriptive analysis approach assisted by SPSS. The population in this study consisted of students in classes XI-1, XI-2, and XI-3, totaling 97 students. The entire population was used as the sample in this study. Data collection techniques in this research were through questionnaires, observation, documentation, and tests. The data collection instrument is a questionnaire sheet. The data analysis technique uses inferential statistical analysis. The results of this research indicate that the variable use of interactive media based on Adobe Animate CC has a significant influence on the variable of student participation in history learning. The main results of this research prove that the use of Adobe Animate CC interactive media is very suitable for teachers to apply continuously in history learning because it can have a good impact on students, thereby increasing student participation in learning. The research implication is that the use of interactive media can increase students' interest and motivation in learning history, changing learning that is often considered boring into a more exciting and interactive experience.

1. INTRODUCTION

History education taught in high schools has a strategic position in shaping the character and civilization of a dignified nation and in forming Indonesian people who have a sense of nationality and love for their country. History is a subject with a high level of difficulty understanding the material, so many students complain that they do not prefer to learn history (Alfin, 2019; Astuti & Tarto, 2020). This is because history contains things that have been in the past and abstract thoughts about an event. Apart from that, history also focuses more on learning by rote learning. So, students have difficulty understanding the historical material taught by the teacher (Nasution & Diansyah, 2020; Sirnayatin, 2017). Two factors need to be emphasized in history learning. First, history learning is closely related to social learning in society. Activities related to community problems that require direct involvement, such as field observations, are hampered (Rulianto, 2019; Safirah et al., 2020). Therefore, social presence between teachers and students is essential so that social interaction can occur. Second, in everyday

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situations, students' interest in learning is low (Raihany et al., 2022; Rambe et al., 2021). In general, it is said that teachers must always be up to date with the characteristics of students as a digital generation. The solution is that teachers must be creative and innovative in developing learning media (Kamarga, 2016; Yulia & Ervinalisa, 2017). The innovation provided can be in the form of interactive learning, an internet-based program that can be used in history learning (Astalini et al., 2022; Atmaja, 2019). Media is an important factor in learning activities. Learning media is a tool or any form of assistance used in the learning process to convey information or subject matter to students. to support the success of the student learning process so that it is effective and efficient by using a computer system because the process of conveying information is easier, faster and more accurate. Suggests that learning media is a component of learning resources that contains teaching materials that can stimulate students to learn (Arsyad, 2017). Learning media can support teacher communication with students during the learning process through text, audio, images, animation, video and graphics. Furthermore, multimedia-based learning is learning that uses multimedia computer assistance using Android (Aprianti et al., 2023; Kurniawati & Nita, 2018; Panjaitan et al., 2020; Yazid et al., 2021). Media is anything that can be used to channel messages from the sender to the recipient, so that it can stimulate thoughts, feelings, according to the message from the sender to the recipient, so that it can stimulate thoughts and feelings (Astalini et al., 2022; Utomo & Ratnawati, 2018).

The use of media can help and simplify complex concepts so that students can understand the material easily and the use of media in learning can help establish good communication between educators and students (Arliza et al., 2019; Sudarman et al., 2020).. Learning media can help explain abstract thoughts and also the past that history has, one example is by showing photos or videos of past events, students are invited to see what these events were like, so that students don't just imagine in their minds. Recent advances in multimedia interfaces, text conversation software, and agent creation technologies have led to the emergence of animated pedagogical agents in learning environments. Multimedia in learning aims to be a means of introducing knowledge, skills, information, and can stimulate students' interest in learning so that learning becomes more effective(Angraini & Nurmaliza, 2022). Meanwhile, learning using learning media will form a mastery process due to interactions in learning (Betari & Junaidi, 2020). Learning media is in the form of interactive media in the form of application software (Niam & Auliya, 2022). Interactive media refers to digital products and services on computer-based systems that respond to user actions by presenting content such as text, moving images, animation, video, audio, and video games. So in the learning process, learning media becomes a supporting tool that can help facilitate the delivery of teaching materials taught to students, with the hope of providing changes in the form of knowledge (cognitive), attitudes (affective) and skills. (psychomotor)(Yuwita et al., 2019).

Interactive multimedia combines text, images, sound and animation to help students understand the concepts and principles being taught, so that learning becomes more fun and interactive (Saidah & Damariswara, 2021). Interactive multimedia developed using the drill and practice model is intended to train users to have skills or strengthen mastery of a concept. The program also provides a series of questions which are usually displayed randomly, so that every time it is used the questions that appear will always be different, or at least in different combinations(Pujawan, 2018; Septiani et al., 2020). Interactive multimedia which is currently widely used in learning media makes students more independent in learning. Apart from that, students' critical thinking abilities can also be improved through the learning process using interactive multimedia-based teaching materials (Angraini & Nurmaliza, 2022; Khamparia & Pandey, 2017). Utilizing intelligent interactive media in educational preparation may be a miracle. It plays an important role in helping students in their form of learning. In this way, it can be concluded that interactive media enhances and empowers students to memorize better (Asysyura et al., 2023; Panjaitan et al., 2020). Interactive multimedia is very effectively used as learning material to improve students' cognitive learning outcomes(Rambe et al., 2021; Tafonao, 2018). Therefore, it is very important to have learning media, especially interactive multimedia, to support the learning process so that it is effective.

Multimedia can make it easier for students to access information via the internet and gain various learning experiences by providing interesting learning software (Heliawati et al., 2022; Riyanto & Gunarhadi, 2017). For example, authoring tools such as Articulate Storyline 3 can provide various training menus according to students' time and abilities and help students visualize abstract objects such as the properties of acid-base and neutral solutions. One of the innovative interactive learning media for students is to use interactive media based on Adobe Animate CC. Adobe Animate CC is software that has many functions such as creating animations, interactive media, games, and other multimedia-based applications as well as applications that are an evolution of Adobe Flash Professional CC, Macro Flash, and Future Splash Animator (Dwi Rahayu et al., 2021; Hamdani & Hasanah, 2022). The advantage of

interactive multimedia over other media is that apart from slightly reducing production costs, interactives are easier to create, users can also apply directly by visiting existing pages. Adobe Animate CC has several advantages compared to other product development applications, namely allowing the selection of templates for the electronic products being created, offering three types of command codes that can be used on different electronic product templates, namely ActionScript, HTML5 Canvas, WebGL, and can create animations. Interactive multimedia designed using Adobe Animate CC 2019 software can be used as a learning medium for students (Ina & Mufit, 2022). So it is one of the recommended software for creating interactive learning media. Participation can also motivate students in participating in teaching and learning activities. That is a good thing. Participation can also shape students to be more active in participating in every learning activity so that students understand that we can gain knowledge with effort in learning. Participation also provides a means to improve teaching instruction and present the educational process to students (Chasanah et al., 2019; Yusuf Alfino et al., 2019). Student participation has an important role in the success of learning. Active student participation can achieve learning goals so that students have better academic achievement (Muslih et al., 2021). Apart from that, student participation in learning activities can also be used as a benchmark by teachers whether students have understood the material being taught well or not. This can also be used by teachers to find out the difficulties and obstacles experienced by students during learning. So, through interactive learning media based on Adobe Animate CC, it is felt to be very appropriate in an effort to increase student participation in history learning, which so far has been felt that history learning is less interesting for students, because the material used in history learning has abstract concepts and is sometimes difficult to explain to students, so With this media, it will make it easier for teachers to convey material that they find difficult to students, besides that it will also be easier for students to understand the material. So with this media students can learn history independently anywhere and anytime. Interactive Media Based on Adobe Animate CC on Student Participation in History Learning.The novelty of research on the effect of using interactive media based on Adobe Animate CC on student participation in history learning lies in the use of sophisticated animation technology to facilitate more interesting and effective learning. Different from conventional methods, using Adobe Animate CC allows presenting historical material through interactive animations that can visualize historical events in a dynamic and interesting way. This research aims to analyze the influence of using interactive media based on Adobe Animate CC on student participation in history learning.

2. METHODS

The approach used in this research is a quantitative approach with an experimental type. namely by comparing class XI-1 as the control class and XI-2 and XI-3 as the experimental class. In its implementation, different treatments were carried out between the control class and the experimental class, where in the experimental class there was special treatment using the interactive media Adobe Animate CC during the history learning process, while the control class only used conventional learning. The research design used in this study was a pretest and posttest control group design. The posttest was carried out at the end of the learning activity to find out how much influence the treatment had. The purpose of giving a post-test at the end of the lesson is to obtain data on students' critical thinking abilities in both the experimental and control classes. Giving a post-test at the end of the activity will provide an idea of how big the impact of the treatment was on the experimental class. The experimental quantitative research procedure to examine the effect of using interactive media based on Adobe Animate CC on student participation in history learning begins by designing an experimental design involving two groups: an experimental group that uses interactive media based on Adobe Animate CC and a control group that uses conventional teaching methods. First, select a random sample of students from the target population to ensure good representation. Next, conduct a pretest on both groups to measure their initial level of participation. After that, give treatment to the experimental group by integrating interactive media based on Adobe Animate CC in history learning for a certain period, while the control group received learning using traditional methods. During the experimental period, monitor and record student participation levels using validated participant observation instruments. After the treatment period ends, conduct a posttest on both groups to measure changes in student participation. Analyze pretest and posttest data using appropriate statistical techniques, such as independent t-tests, to determine whether there are significant differences between the experimental group and the control group. Finally, interpret the results of the analysis to conclude whether the use of interactive media based on Adobe Animate CC has a positive influence on student participation in history learning. The population in this study were students in class XI-1, XI-2 and Data collection techniques in this research are through questionnaires, observation, documentation, and test. The independent variable in this research is Adobe Animate CC

Interactive Media, while the dependent variable in this research is student participation in history learning. The research instrument grid is presented in Table 1 and Table 2.

Table 1. Grid of Instruments for Using Interactive Media Based on Adobe Animate CC

Variable	Indicator	Question Item Number
Interactive media based on Adobe Animate CC (X)	Students are enthusiastic about participating in interactive Adobe Animate CC learning	1 - 5
	Students' attitudes towards the use of interactive learning media, Adobe Animate CC media	6 - 11
	Students' interest in studying history	12 - 14
	Interactive learning media can help students understand the concept of history learning	15 - 18
	Developing students' creativity in doing assignments	19 - 23
	Student creativity in solving problems	24 - 26
	Foster cooperation in groups	27 - 30

Table 2. Variable Y Grid Research Questionnaire Instrument (Student Participation in History Learning)

Variable	Indicator	Question Item Number
Student participation in history learning (Y)	Student participation in paying attention to teacher teaching	1 - 5
	Student participation when receiving lesson materials	6 - 14
	Student participation during group discussion activities	15 - 25
	Student participation when working on individual assignments	26 - 30

The data analysis technique uses inferential statistical analysis. Furthermore, in analyzing the data obtained, validity tests, reliability tests, simple linear regression analysis, correlation coefficient analysis, determination coefficient analysis and hypothesis testing are used.

3. RESULT AND DISCUSSION

Results

This research was conducted on 97 students at MAN Palangka Raya City. Before testing the hypothesis, the analysis prerequisite tests are first carried out, namely the normality test, linearity test. The normality test obtained is presented in Table 3.

Table 3. Normality Test Results

Number	Variable	Say. Mark.	Condition	Information
1	Use of Interactive Media Based Adobe Animate CC	0,329	> 0.05	Normal
2	Student Participation in Learning History	0,241	> 0.05	Normal

From the table above it can be concluded that the data for variables X and Y are normally distributed because the significance value is > 0.05. The linearity test obtained is presented in Table 4.

Table 4. Linearity Test Results

Source	Sum of Squares	df	Means Square	F	Say.
Linearity	2999.647	1	2999.647	21.837	.000
Deviation from Linearity	6428.697	43	149.505	1.088	.383
In Groups	7143.140	52	137.368		
Total		96			

From the output table above, the significance value = 0.000 is less than 0.05, because the significance is less than 0.05, it can be concluded that there is a close relationship between the variable use of interactive media based on Adobe Animate CC and student participation in history learning. linear relationship. The simple linear regression test obtained is presented in Table 5.

Table 5. Simple Linear Regression Test Results

Model	R	R square	Adjusted R Square	Std. Estimation Error
1	0.425	0.181	0.172	11.95247

In the table above the correlation value is 0.425. This value can be interpreted as meaning that the relationship between the two research variables is in the strong category. The R Square value or coefficient of determination (KD) is 18.1%, so it can be concluded that there is an influence of the use of interactive media based on Adobe Animate CC (X) on student participation in history learning (Y) of 18.1% and the remaining 81.9% influenced by other factors. The significance tests obtained are presented in Table 6.

Table 6. Significance Value Test Results

Model	Sum of Squares	df	Means Square	F	Say.
Regression	13571.837	1	2999.647	20.997	.000
Left over	16571.485	95	142.861		
Total		96			

Based on the table above, the Sig. = 0.000, means Sig. < of significant criteria (0.05). Thus, the regression equation model based on research data is significant or the regression equation model meets the criteria. The Simple Regression Coefficient Test obtained is presented in Table 7.

Table 7. Simple Regression Coefficient Test Results

Model		Unstandardized Coefficients		Standardized Coefficient	T	self
		B	Std. Error	Beta		
1	Constant	33.036	8.097		4.080	0
	VAR00001	0,406	0,089	0,425	4.582	0

The results of the simple regression coefficient calculation above show a constant coefficient value of 33.036, the independent variable coefficient (X) is 0.406. So the regression equation Y = 33.036 + 0.406 X is obtained. The correlation test results obtained are presented in Table 8.

Table 8. Correlation Test Results

	Source	R1	R2
Result 1	Pearson Correlation	1	0.425
	N	97	97
Result 2	Pearson Correlation	0.425	1
	N	97	97

From the data above, it can be concluded that the variable use of interactive media based on Adobe Animate CC (X) and the variable student participation in history learning (Y) have a strong influence because they have a correlation value of 0.425. T-test The test results obtained are presented in Table 9.

Table 9. T-test test results

Model		Unstandardized Coefficients		Standardized Coefficient	T	self
		B	Std. Error	Beta		
1	Constant	33.036	8.097		4.080	0
	VAR00001	0,406	0,089	0,425	4.582	0

The t table value at the 5% significance level db = 94 (db = N – k – 1 or 97 – 2 – 1 for N = 97) is 1.66123. The tcount obtained using SPSS was 4.582. From the calculation results of tcount of 4.582 above compared with ttable (db = 41) which is 1.66123 at the 5% significance level, then tcount > ttable then Ha is accepted and Ho is rejected. In other words, reject the null hypothesis (Ho) and accept the alternative hypothesis (Ha) to test both variables.

Discussion

The results of this research indicate that the variable use of interactive media based on Adobe Animate CC (X) has a significant influence on the variable student participation in history learning (Y). This is proven by the calculation results of tcount > ttable, namely 4.582 > 1.66123. With a coefficient of determination of 18.1%, it has a positive effect on the use of media on student participation in history learning for class XI MAN Palangka Raya City students in the 2020/2021 academic year. Meanwhile, 81.9% are factors that influence variable Y from other factors not examined by researchers. The application of interactive learning media based on Adobe Animate can increase student participation in teaching and learning process activities, so that in its implementation students are very active in participating in the ongoing learning, because Adobe Animate interactive multimedia is equipped with quizzes and games. to measure students' level of understanding (Khamparia & Pandey, 2017; Lestari et al., 2023; Septiani et al., 2020). For this reason, regarding this matter, it is very important to use interactive media in history learning so that learning is not boring for students.

Based on the results of previous research, the use of interactive multimedia based on Adobe Animate in space building materials was declared valid by experts. This is proven by the average validity level of 93.1% in the very valid category. Apart from that, interactive multimedia based on Adobe Animate on space building materials is also stated to be practical. This is proven by the average practicality level of 86.96% in the very practical category. Adobe Animate interactive multimedia is equipped with quizzes and games to measure students' level of understanding. The validation results with the very appropriate category show that this media can be used as a learning tool, so that in its application this media has a positive impact on student participation (Amirudin & Setuju, 2018; Audhiha et al., 2022; Riyanto & Gunarhadi, 2017).

Furthermore, previous research conducted on virtual laboratory media based on Adobe Animate received a very good response from students with an average percentage of 87.5%. Adobe Animate-based virtual laboratory media can help students understand material, especially in abstract learning such as physics (Maryani et al., 2023). As well as other previous research regarding the development of science learning media based on Adobe Animate CC on human digestive system material for class VIII SMP/MTs which received a good response. So based on several research results, it can be said that the use of interactive media based on Adobe Animate CC has a positive influence on increasing student participation in learning (Hamdani & Hasanah, 2022; Lestari et al., 2023). Thus, it can be believed that the use of interactive media based on Adobe Animate CC can be a factor that can influence student participation in learning, so that this variable can be used to further increase student participation in history learning. The implications of this research can provide insight to history teachers about the importance of using learning media to increase student participation in history learning in the classroom. Therefore, every teacher needs to develop the ability to use learning media. However, this research also has limitations. This research does not use all factors that can influence student participation in history learning and only uses learning media. Other variables not identified or considered in this study may also have an influence on student participation in history learning. The implication of this research is that the use of interactive media can increase students' interest and motivation in learning history, changing learning that is often considered boring into a more interesting and interactive experience. Also, with Adobe Animate CC, historical material can be presented with more dynamic and interactive visualizations, allowing students to understand historical concepts better through animation and simulation. The limitations of this research include several aspects that need to be considered. First, this research may be limited to a sample of students from one or a few specific schools, so the results cannot be generalized to the entire student population. Second, the success of using interactive media based on Adobe Animate CC is very dependent on the teacher's technical abilities in operating the software, which can vary from one teacher to another. Third, accessibility and availability of adequate technological devices in each school is also a limiting factor, considering that not all educational institutions have complete facilities. Based on these limitations, it is recommended that further research include a broader and more diverse sample to increase the generalizability of the findings. In addition, intensive training for teachers regarding the use of Adobe Animate CC needs to be held to ensure effective implementation. It is also recommended to conduct comparative studies between various types of interactive media to determine the most effective methods in increasing student participation and learning outcomes. Lastly, collaboration with education

stakeholders to provide adequate technological facilities in schools is also important to support the implementation of this interactive media.

4. CONCLUSION

Based on the results of the analysis, it can be concluded that the use of interactive media based on Adobe Animate CC has a positive and significant effect on student participation in history subjects, where when the interactive media Adobe Animate CC is used in learning, it looks very active and the level of participation is quite high compared to students who are taught without using it. Adobe Animate CC interactive media. This shows that the more frequently the use of interactive media based on Adobe Animate CC in learning, the higher the level of student participation in history learning, and vice versa. The use of Adobe Animate CC interactive media is very suitable for teachers to apply continuously in history learning because it can have a good impact on students, thereby increasing student participation in learning.

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