

# Effectiveness of Canva-Based Interactive Animation Media in Enhancing Learning Interest of Second-Grade Madrasah Ibtidaiyah Students

## Raudhatul Fitriyah\*

Madrasah Ibtidaiyah Teacher Education, UIN Sultan Maulana Hasanuddin Banten, Indonesia Fitri Hilmiyati

Tadris English, UIN Sultan Maulana Hasanuddin Banten, Indonesia **Juhii** 

Madrasah Ibtidaiyah Teacher Education, UIN Sultan Maulana Hasanuddin Banten, Indonesia

\*Correspondence author: <u>raudhatulfitriyah3@gmail.com</u>

#### Abstract:

This research is motivated by the low interest of students in learning the material 'The Word of Invitation and the Word of Refusal', which indicates the need for a method that can be used to improve the learning process. The Word of Invitation and the Word of Refusal' which indicates the need for a more effective learning method. This study aims to analyze the Effect of Canva-based interactive animation media on the interest of 2nd-grade students at Madrasah Ibtidaiyah Masarratul Muta'allimin in Banten Province. A quasi-experimental design involved 56 students divided into experimental and control groups. Student interest data collected through questionnaires and analyzed using normality, were homogeneity, and t-tests. The t-test results indicated a significant difference between the two groups, with a t value of -27.117 (p = 0.000) and an average difference of 19.036. These results suggest that Canva-based interactive media significantly enhances students' interest in learning compared to conventional methods. Canva-based interactive media can effectively increase student engagement. Recommendations for educational practice include integrating interactive media into classroom learning to boost student involvement. Further research is recommended to explore the long-term impact of this media on students' academic performance.

Keywords: Animation; Canva-Based Interactive; Interactive; Learning Interest

DOI: <u>10.18952/aladzkapgmi.v12i2.13896</u> **Received**: 2024-09-05; **Revised**: 2024-09-10; **Accepted**: 2024-09-23; **Published**: 2024-10-01

#### How to cite :

Fitriyah, R., Hilmiyati, F. and Juhji, J. (2024). Effectiveness of Canva-Based Interactive Animation Media in Enhancing Learning Interest of Second-Grade *Madrasah Ibtidaiyah* Students. Al-Adzka: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah, 14(2). 135-150



This is an open access article under <u>Creative Commons Attribution 4.0 International License</u>

# Introduction

Education is the main foundation in character building and individual abilities (Sutarman et al., 2017; Virdi et al., 2023). One of the most critical aspects of the education process is learning interest, which affects how students absorb and understand the material taught by the teacher (Triarisanti & Purnawarman, 2019; Ernawati et al., 2022; Uyun et al., 2022). In the current digital era, educational technology development has encouraged various innovations, including interactive media as teaching aids (Kolås, 2015; Ramdani et al., 2021). These media, especially animation-based, have great potential to increase student engagement and understanding by presenting information in an exciting and digestible manner (Sari, 2018; Juhji et al., 2022; Widayanti & Juhji, 2023). Canva, as one of the popular graphic design platforms, has been an effective tool for creating visually rich interactive educational media (Nurmayuli, 2023; Hilmiyati et al., 2024). Although various studies have examined the benefits of animation in education, there are still few that specifically examine the impact of using Canva-based interactive animation on students' interest in learning at the primary school level, especially in Madrasah Ibtidaiyah (Widiarti et al., 2024).

Learning interest plays a significant role in student engagement and overall academic performance, especially in the early stages of education (Harackiewicz et al., 2016). However, conventional teaching methods that rely heavily on static images and text often fail to capture students' attention, leading to decreased motivation and lower engagement in learning activities (Zenki-Dalipi & Osmani, 2022). o address this issue, the integration of interactive media, such as Canva-based animations, has emerged as a promising tool in modern educational practices (Susila et al., 2019; Dalimunthe & Reinita, 2022; Helingo et al., 2023; Hilmiyati et al., 2024). Canvas interactive features allow for more dynamic and visually engaging content, which has been shown to stimulate student interest and improve learning outcomes (Menacho-Vargas et al., 2022; Wulandari et al., 2022). Despite the growing body of research on educational technology, there still needs to be a gap in understanding the specific impact of Canva-based interactive media on young learners in religious schools such as Madrasah Ibtidaiyah. Therefore, it is essential to analyze the effectiveness of this media in enhancing the learning interest of second-grade students in a madrasah ibtidaiyah educational setting.

To overcome the challenges posed by conventional teaching methods, interactive media, such as Canva-based animation, offers a promising solution for enhancing students' learning interests. Canva allows teachers to create visually appealing and engaging content tailored to meet young learners' needs, making complex concepts more accessible and enjoyable (Purba & Harahap, 2022; Wulandari et al., 2022). Research has shown that interactive digital tools significantly increase student motivation and active participation in learning processes (Fonseca & García-Peñalvo, 2019; Mou & Damhuri, 2023). Moreover, Canva's ability to integrate multimedia elements such as animations, images, and text cohesively aligns with the cognitive theory of multimedia learning, which posits that students learn more effectively when information is presented in multiple formats (Mayer, 2005). By leveraging Canvas interactive features, educators can create a more stimulating learning environment that captures students' attention and fosters deeper engagement, ultimately leading to improved learning outcomes (Hampel & Pleines, 2013; Wibowo et al., 2022). Given the increasing availability of digital tools in educational settings, incorporating

Canva-based media into the curriculum could be an innovative approach to address the declining interest in traditional learning methods.

Various efforts have been made to improve the quality of primary education (Al Farisi et al., 2023; Junita et al., 2024; Mukaromah et al., 2024), but there are still significant challenges in increasing students' interest in learning, especially in second-grade Madrasah Ibtidaiyah. Though often more varied and interactive, traditional teaching methods can result in low student engagement, ultimately diminishing their interest in learning (Giorgdze & Dgebuadze, 2017; Nuralyanti, 2023). Previous research shows that a lack of interest in learning can hinder students' cognitive and affective development (Kirschner & Van Merriënboer, 2013; Deci & Ryan, 2016; Bandura, 2018) and reduce the educational process's overall effectiveness. On the other hand, implementing technology-based interactive learning media has been proven to increase students' interest in learning by presenting material in a more exciting and easy-to-understand manner (Soidik et al., 2020).

Although research on the use of interactive media and animation in education has shown positive results (Lin et al., 2017; Jeno et al., 2019; Helingo et al., 2023; Nurpiani et al., 2024), there are still significant gaps in the existing literature, primarily related to the utilization of Canva as a platform to develop animated media specifically designed to increase students' interest in learning in Madrasah Ibtidaiyah. Some studies have revealed that interactive media can increase students' interest in learning (Nurpiani et al., 2024). However, most of their research used other platforms (Kim et al., 2024). For example, research by Sunami & Aslam, (2021) showed that using Zoom meeting-based animated video learning media can improve understanding of complex concepts among high-grade primary school students. However, this study did not specifically explore the Effect on low-grade primary school students. Similarly, research by <u>Alamsyah et al., (2023)</u> emphasized the benefits of technology-based media in learning, emphasizing the benefits of technology-based media in learning, but did not explicitly address Canva's potential as an effective educational tool in the Madrasah Ibtidaiyah environment.

Existing studies demonstrate the potential of interactive media to increase student engagement and comprehension. However, there is still a void in research exploring using Canva-based media innovations to increase Madrasah Ibtidaiyah students' interest in learning, particularly in the lower grades. Given the importance of the cognitive development period in elementary school age, a more specific approach is needed in selecting and applying learning media that can stimulate students' interest (Prasong et al., 2022).

The novelty of this study lies in its focus on assessing the effectiveness of Canvabased interactive animation media in enhancing the learning interest of second-grade students in a religious educational setting, specifically Madrasah Ibtidaiyah. While numerous studies have explored the impact of digital tools and multimedia on student engagement in general education settings (Solas & Sutton, 2018; Susila et al., 2019; Menacho-Vargas et al., 2022), limited research has addressed the use of such tools in madrasahs, where religious values and cultural contexts may influence pedagogical approaches. This study bridges that gap by examining how Canvas interactive features can be adapted to align with the madrasah learning environment, providing a fresh perspective on integrating technology in religious education. Moreover, the research offers a unique contribution by focusing on young learners, a demographic often overlooked in studies on digital media's impact, which predominantly centers on older students. By evaluating the effectiveness of Canva in this specific context, the study introduces an innovative approach to improving learning interest, which could have broader implications for integrating technology in similar educational settings.

The author's observations and interviews at Madrasah Ibtidaiyah Masarratul Muta'allimin Banten Province identified student problems in classroom learning, such as a lack of enthusiasm for learning, a lack of interest in the learning process delivered in class, difficulty focusing student attention when learning explanations are given, and a lack of active student participation in learning activities. Based on these problems, the research aims to analyze the effectiveness of using Canva-based interactive animation media in enhancing the learning interest of second-grade Madrasah Ibtidaiyah students.

## **Research Method**

This study uses a quasi-experimental design to measure the Effect of Canvabased interactive animation media on students' learning interests. This design involves an experimental group that receives intervention in the form of interactive animation media and a control group that follows conventional learning using image media. Although the quasi-experimental method cannot fully control external variables, this study still tries to maintain relevant and realistic learning conditions through daily classroom practices (Wahyudi, 2022). This approach has been widely used in educational research to test the effectiveness of interventions in situations that do not allow random assignment (Creswell & Creswell, 2017).

This study's population consisted of 56 students of class II of Madrasah Ibtidaiyah Masarratul Muta'allimin Banten in the 2024/2025 academic year. The population was divided into two classes: class II A, with 28 students, and class II B, with 28 students. The sample was determined purposively, with class II A as the experimental group using Canva-based interactive animation media and class II B as the control group using image media in conventional learning.

Research data were collected through a questionnaire designed to measure students' learning interests. After the Indonesian language learning process with the material 'Invitation Words and Rejection Words' was completed, this questionnaire was given to both experimental and control groups. The questionnaire includes four indicators of learning interest: 1) feelings of pleasure, 2) attention, 3) interest, and 4) involvement. The experimental group received intervention in the form of Canvabased interactive animation media, while the control group used conventional learning methods with image media.

The data analysis techniques include normality tests, homogeneity tests, and ttests. The normality test is carried out to check whether the data from both groups are normally distributed (<u>Pramono et al., 2021</u>). The homogeneity test aims to ensure that the variances between the two groups are the same. After the assumptions of normality and homogeneity are met, the t-test is used to compare the average results of students' learning interest between the experimental and control groups to determine whether there is a significant difference.

#### Results and Discussion Results

Figure 1 illustrates the learning process in the experimental class using Canvabased interactive animation media. The image aims to show the effect of interactive media on student engagement and participation, especially when learning invitation and refusal words in Indonesian language lessons.



Figure 1. Learning by Using Canva-Based Interactive Animation Media

As shown in Figure 1 (a), students in the experimental class showed increased enthusiasm and active engagement during the learning session. Interactive animations allow students to understand concepts more effectively and confidently express their ideas. This results in a more enjoyable learning experience, significantly increasing their interest in the subject matter.

Figure 2 illustrates the learning process in the control class (class II B), where picture media is used to support the delivery of teaching materials. This approach is commonly employed to aid students' understanding of the subject matter through visual representations.



Figure 2. Learning by Using Picture Media in Control Class

However, as shown in Figure 2, static picture media may be limited in effectiveness for less attentive students who lack enthusiasm or show minimal engagement. The passive nature of static images makes it difficult to capture and maintain the interest of disengaged students, potentially reducing the overall impact of the learning experience.

Table 1 presents the results of the normality test for two classes of students, assessed using the Kolmogorov-Smirnov and Shapiro-Wilk tests. This test aims to determine whether the data from each class follow a normal distribution, which is a critical assumption in many statistical analyses. Class II B (class 1) and class II A (class 2) were analyzed for their normality characteristics using these two statistical methods.

	Class	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
		Statistic	Df	Sig.	Statistic	df	Sig.	
Value	1	.129	28	.200*	.967	28	.515	
	2	.136	28	.198	.973	28	.668	

Table	1.	Normality	Test	of	<b>Two-Class</b>	Students
-------	----	-----------	------	----	------------------	----------

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The Kolmogorov-Smirnov test results indicate that the data for class II B have a statistic of 0.129 and a significance value of 0.200. Similarly, class II A shows a statistic of 0.136 with a significance of 0.198. Since both significance values exceed the threshold of 0.05, the data in both classes can be considered normally distributed, meaning the assumption of normality is not violated.

In addition, the Shapiro-Wilk test further confirms this finding. For class II B, the Shapiro-Wilk statistic is 0.967 with a significance value of 0.515, while for class II A, the statistic is 0.973 with a significance of 0.668. These values, also more significant than 0.05, reinforce the conclusion that the data from both classes are typically distributed. Thus, subsequent statistical analyses can proceed under the normality assumption for these data sets.

Table 2 displays the results of the homogeneity test conducted to determine whether the variances of the scores between students in two different classes—one using conventional learning methods and the other utilizing Canva-based interactive animation media—are equal. This test is essential for verifying whether the assumption of homogeneity of variances is met, which is a prerequisite for specific statistical analyses like the T-test.

Levene Statistic	df1	df2	Sig.
.864	1	54	.357

Table 2	. Homogeneity	Test of	Students	in	Two	Classes
---------	---------------	---------	----------	----	-----	---------

The Levene's test result shows a statistical value of 0.864 and a significance (Sig.) value of 0.357. Since this significance value is greater than the alpha level 0.05, we do not reject the null hypothesis ( $H_0$ ). It implies that there is no statistically significant difference in the variances between the control and experimental classes, indicating that the variances are homogeneous.

Given that the assumption of equal variances is met, it is appropriate to continue with statistical analyses that require this condition. This result ensures that any differences observed in subsequent analyses are not due to variations in group variances but rather reflect the true impact of the teaching methods under study. Thus, comparisons between the two classes can be made more reliably.

Table 3 presents the results of Levene's Test for Equality of Variances and the t-test for Equality of Means, used to compare the learning interest scores between two student groups: the control group, which used conventional learning methods, and the experimental group, which used Canva-based interactive animation media. These tests help assess the equality of variances between the groups and whether there is a significant difference in their mean scores.

		Levene's Equali Variar	Test for ty of nces		t-test for Equality of Means						
		F	Sig.	ig. t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
									Lower	Upper	
Value	Equal variances assumed	.864	.357	- 27.117	54	.000	-19.036	.702	-20.443	-17.628	
	Equal variances			- 27 117	51.825	.000	-19.036	.702	-20.444	-17.627	

Table 3. Two-class Student T Test

Levene's Test shows an F value of 0.864 with a significance of 0.357, indicating that the assumption of equal variances is satisfied, as the p-value is more significant than the 0.05 threshold. This result allows the t-test for Equality of Means to proceed under the assumption of equal variances, ensuring that unequal variances between the two groups do not influence any differences in means.

Assuming equal variances, the t-test for Equality of Means yields a t-value of -27.117 with a significance level (Sig. 2-tailed) of 0.000, indicating a statistically significant difference in the learning interest scores between the two groups. The mean difference of -19.036, with a 95% confidence interval ranging from -20.443 to -17.628, highlights that students in the experimental group demonstrated significantly higher interest in learning than those in the control group. This decisive statistical difference, reinforced by a p-value less than 0.001, confirms the effectiveness of Canva-based interactive animation media in increasing students' learning interest.

#### Discussion

The use of Canva-based interactive animation media, as demonstrated in Figure 1, significantly enhances student engagement and participation, particularly in language learning settings where concepts such as invitation and refusal words are taught. Interactive media provide a dynamic learning environment that facilitates better understanding and allows students to express their ideas more confidently, as seen in the experimental class. It aligns with prior research, which emphasizes the role of interactive digital media in fostering active learning and increasing student motivation (Fonseca & García-Peñalvo, 2019; Ghofur & Youhanita, 2020; Mou & Damhuri, 2023). In addition, interactive digital media also increased students' interest in learning (Lestari & Wirasty, 2019; Pulungan et al., 2022; Helingo et al., (2023). Interactive media's ability to present content visually engaging and cognitively stimulatingly contributes to higher student interest and participation (Wibowo, 2023). However, it remains debatable whether this heightened engagement translates into long-term retention of language skills, a concern raised by scholars who argue that while interactive tools boost short-term motivation, they may not necessarily improve more profound cognitive learning outcomes (Mayer, 2022).

In contrast, the control class depicted in Figure 3, which used static picture media, presents a different challenge. Although static images are traditionally regarded as effective visual aids for concept clarification (Shabiralyani et al., 2015), their passive nature limits their ability to fully engage students, especially those with lower initial motivation or attention levels. As Baylen et al., (2021) and Amalia &

<u>Suharto, (2024)</u> suggest, static media can fall short of capturing the attention of disengaged students, leading to reduced learning outcomes. This limitation highlights the ongoing academic debate regarding the superiority of interactive versus static media in educational settings. While proponents of interactive media emphasize its ability to enhance engagement and participation (Lukita et al., 2017), critics argue that the cognitive load imposed by complex animations may overwhelm some students, thereby diminishing learning efficacy (Sweller, 2020). Consequently, further studies are necessary to explore how different media types influence engagement and long-term learning outcomes.

Conventional media, such as image media, often show limitations in increasing students' interest in learning (Nicolaou et al., 2019). Although image media provides a clear visual representation, it is usually static and less interactive (Andriyani et al., 2020). It can cause students to feel less stimulated and less enthusiastic about participating in the lesson. In the control class that used picture media, students tended to show lower interest in learning. They may be less responsive during lessons and less likely to be actively involved in discussions or activities provided by the teacher.

In contrast, implementing Canva-based interactive animation media significantly increased students' interest and engagement. This animated media introduces moving and interactive visual elements, successfully capturing students' attention more thoroughly and dynamically (Ploetzner et al., 2020). In this context, students show increased motivation and greater engagement, such as active participation and deeper involvement with the material being taught. The striking difference between these two methods confirms that interactive animated media can create a more effective learning experience than conventional drawing media, which cannot often optimally stimulate student interest and responsiveness (Ardiansyah, 2022).

The t-test results, assuming equal variances, yield a t-value of -27.117 with a p-value of 0.000, demonstrating a highly significant difference between the mean scores of the two groups. The mean difference of -19.036, with a 95% confidence interval ranging from -20.443 to -17.628, clearly indicates that students in the experimental group exhibited substantially higher learning interest than their peers in the control group. This finding is consistent with previous studies that have shown the positive effects of interactive media on student engagement and motivation (Mayer, 2022). Using Canva-based interactive animations provides a more stimulating learning environment, making abstract concepts more accessible and engaging for students.

However, the integration of digital media into learning has sparked academic debate. While this study supports the notion that interactive media can significantly enhance learning interest, some researchers argue that the positive effects may be short-lived and primarily driven by novelty (Clark & Mayer, 2023). Kirschner and Van Merriënboer (2013) have raised concerns that technology-enhanced learning tools may lead to cognitive overload, especially when not well-aligned with the instructional design principles of cognitive load theory. In contrast, the present study's findings suggest that Canva-based media's interactive features, such as animations, could help simplify complex information, thereby enhancing cognitive processing and reducing the likelihood of overload.

The use of Canva-based interactive animation media has a significant impact on students' learning interests. The average score of students in the experimental class using this media was significantly higher than the control class using conventional learning methods (Utami et al., 2023). In learning theory, this finding supports the concept that interactive digital media can increase student engagement and deepen their understanding of the material. It also aligns with the theory of cognitivism, which emphasizes the importance of visual and interactive media in facilitating more effective information processing (Sari & Yatri, 2023).

There are several notable differences compared to other interactive media, such as Zoom or PowToon. Zoom, as a video conferencing platform, facilitates direct interaction between teachers and students but needs to be improved in providing visually engaging and interactive elements. Zoom primarily focuses on real-time verbal and audiovisual interaction, but it lacks the dynamic visual stimulation offered by Canva-based interactive animations (Wardana et al., 2023). On the other hand, PowToon, also an animation creation platform, shares some similarities with Canva regarding its ability to create visually engaging content (Napitupulu et al., 2021). However, Canva offers a more user-friendly interface with greater flexibility for creating materials tailored to curriculum needs and student interests.

The effectiveness of the interactive animation media is seen from the apparent change in students' interest levels. With the visual and interactive elements in the learning, students become more motivated and engaged in the discussion on invitation and refusal words (Ilyas et al., 2023). It facilitates a more exciting and dynamic learning process, which contributes to increased student attention and a better understanding of the material (Kruger & Doherty, 2016). These findings confirm that Canva-based interactive animation media can increase student engagement and support a more productive learning process.

Using this interactive animated media significantly increased students' interest in learning. By sharing opinions and providing input, more intense collaboration among students creates a more active and participatory learning environment (Asmayani et al., 2023). This increased social interaction strengthens students' communication skills and increases their interest in the subject matter, contributing to an overall increase in learning interest (Jariyah et al., 2024). This suggests that interactive media facilitates concept understanding and creates a more engaging and enjoyable learning experience, which is essential for fostering long-term interest in learning.

This limitation can be due to the need for more interactivity and dynamism offered by conventional image media, which can cause students to feel less engaged and less motivated to process information deeply <u>(Waruwu & Sitinjak, 2022)</u>. Consequently, students' low interest in learning can be affected by how image media is presented in learning. Image media not accompanied by interactive elements or contexts relevant to students' daily lives may need to be more engaging to motivate them <u>(Susanti et al., 2022; Yuniarti et al., 2023)</u>. In this case, a more dynamic and interactive learning strategy, such as Canva-based interactive animation media, could increase students' engagement and interest in learning. This approach can provide a more exciting and relevant learning experience and encourage students to be more active and excited in the learning process <u>(Renaldi et al., 2024)</u>.

It shows that interactive animation media improves understanding of the material and provides a more effective and meaningful learning experience, thus increasing student interest in learning (Alfajri et al., 2022). The positive impact of using this interactive animated media can be seen in the increased students' ability to understand the material presented. It increases learning interest and contributes

to better academic achievement, where students understand concepts more quickly and show a higher sense of enjoyment and attention than conventional methods (Kinaya et al., 2024).

The long-term impact of interactive media on sustained learning interest remains a contentious issue. While the current study demonstrates immediate gains in student engagement, some researchers argue that traditional learning methods may foster deeper cognitive engagement and retention over time, particularly in subjects requiring higher-order thinking (Sweller, 2020). Nonetheless, the solid statistical evidence presented in this study underscores the potential of Canva-based interactive animation as an effective tool for improving learning interest, particularly in contexts where student motivation and engagement are critical to achieving learning outcomes. These results invite further exploration into how such tools can be integrated effectively into diverse educational settings, balancing innovation with pedagogical soundness.

## Conclusion

The study concluded that Canva-based interactive media significantly increased students' learning interest, as evidenced by the solid statistical difference in engagement between the experimental and control groups. These findings suggest that integrating Canva-based media into teaching can be a practical and effective way for educators in Madrasah Ibtidaiyah (Islamic elementary schools) to encourage greater student engagement and make learning more interactive. However, future research should explore the application of this method to other subjects and age groups, such as higher-grade students, to assess its broader impact and potential to improve learning outcomes across a range of learning outcomes.

## References

- Al Farisi, F., Syarifuddin, E., & Zuhri, S. (2023). Collaborative leadership in islamic education: communication is the key to successful TQM practices. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 9(01), 85–96. <u>https://doi.org/10.32678/tarbawi.v9i01.7970</u>
- Alamsyah, A., Dewi, Yuliani, E., Kartika Ramadhan, N., Rosdiah, R., & Sudirman, S. (2023). Efektifitas penggunaan media pembelajaran berbasis canvaterhadap minat belajar siswa di mata pelajaran informatika. *Guru Pencerah Semesta*, 1(2), 77–87. <u>https://doi.org/10.56983/gps.v1i2.603</u>
- Alfajri, M. R., Oktavia, M., & Ayurachmawati, P. (2022). Implementasi media interaktif animasi pada minat belajar materi IPA siswa kelas V. Innovative: Journal Of Social Science Research, 2(1), 308–318. https://doi.org/10.31004/innovative.v2i1.3424
- Amalia, R. R., & Suharto, A. W. B. (2024). Reading Guide and Gadget: How to Build Digital Literacy Through Primary Education Student Learning. Al-Adzka: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah, 14(1), 43–54. <u>https://doi.org/10.18592/aladzkapgmi.v14i1.12506</u>
- Andriyani, A., Dewi, H. I., & Zulfitria, Z. (2020). Penggunaan multimedia dan animasi interaktif terhadap keterampilan membaca permulaan siswa. *Instruksional*, 1(2), 172. <u>https://doi.org/10.24853/instruksional.1.2.172-180</u>
- Ardiansyah, A. (2022). Pengaruh minat belajar terhadap kepuasaan belajar peserta didik dengan media pembelajaran online sebagai variabel moderating. Jurnal Basicedu, 6(1), 1169–1176. <u>https://doi.org/10.31004/basicedu.v6i1.2080</u>

- Asmayani, A., Nasrah, N., & Magfirah, N. (2023). Pengaruh media interaktif animasi terhadap minat belajar siswa pada mata pelajaran IPA siswa kelas V UPT SPF SD Negeri Kalukuang II Makassar. *Journal on Education*, 6(1), 1269–1276. <u>https://doi.org/10.31004/joe.v6i1.3079</u>
- Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. *Perspectives on Psychological Science*, 13(2), 130–136. <u>https://doi.org/10.1177/1745691617699280</u>
- Baylen, D. M., Gratch, J., & Haynes, L. (2021). Multimedia: Moving beyond passive to active learner engagement. In *The Learner-Centered Instructional Designer* (pp. 164–175). Routledge.
- Clark, R. C., & Mayer, R. E. (2023). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & sons.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage publications.
- Dalimunthe, C. N. A., & Reinita, R. (2022). Validity canva video media integrated thematic learning based on PBL models in elementary schools. *Jurnal Gentala Pendidikan Dasar*, 7(1), 132–160. <u>https://doi.org/10.22437/gentala.v7i1.18346</u>
- Deci, E. L., & Ryan, R. M. (2016). Optimizing students' motivation in the era of testing and pressure: A self-determination theory perspective. In W. C. Liu, J. C. K. Wang, & R. M. Ryan (Eds.), *Building Autonomous Learners* (pp. 9–29). Springer Singapore. <u>https://doi.org/10.1007/978-981-287-630-0\_2</u>
- Ernawati, M. D. W., Sudarmin, S., Asrial, A., Haryanto, H., Sanova, A., Kurniawan, D. A., & Azzahra, M. Z. (2022). The influence of student interest on student learning outcomes in science subjects. Jurnal Pendidikan Sains Indonesia (Indonesian Journal of Science Education), 10(4), 849–861. https://doi.org/10.24815/jpsi.v10i4.25306
- Fonseca, D., & García-Peñalvo, F. J. (2019). Interactive and collaborative technological ecosystems for improving academic motivation and engagement. Universal Access in the Information Society, 18(3), 423–430. <u>https://doi.org/10.1007/S10209-019-00669-8</u>
- Ghofur, A., & Youhanita, E. (2020). Interactive media development to improve student motivation. *IJECA (International Journal of Education and Curriculum Application)*, 3(1), 1–6. <u>https://doi.org/10.31764/IJECA.V3I1.2026</u>
- Giorgdze, M., & Dgebuadze, M. (2017). Interactive teaching methods: Challenges and perspectives. *International E-Journal of Advances in Education*, *3*(9), 544–548. <u>https://doi.org/10.18768/IJAEDU.370419</u>
- Hampel, R., & Pleines, C. (2013). Fostering student interaction and engagement in a virtual learning environment: An investigation into activity design and implementation. *Calico Journal*, 30(3), 342–370. <u>https://doi.org/10.11139/CJ.30.3.342-370</u>
- Harackiewicz, J. M., Smith, J. L., & Priniski, S. J. (2016). Interest matters: The importance of promoting interest in education. *Policy Insights from the Behavioral and Brain Sciences*, 3(2), 220–227. <u>https://doi.org/10.1177/2372732216655542</u>
- Helingo, S., Rahim, M., Husain, R. I., & Husain, R. (2023). Canva-based interactive media to increase students' interest in learning class V State primary school 19 Dulupi. *Global Scientific Review*, 22, 73–87.

- Hilmiyati, F., Nafsi, A. G., & Sabri, S. (2024). The development of canva-based animated videos to improve critical thinking skills of elementary/Islamic elementary school students in science classes on human digestive system materials. *Al-Aulad: Journal of Islamic Primary Education*, 7(1), 27–37. <u>https://doi.org/10.15575/al-aulad.v7i1.28770</u>
- Ilyas, M., Hermawati Syarif, & Refnaldi. (2023). The use of english language learning videos designed through canva app: students' perceptions. International Journal of Interactive Mobile Technologies (iJIM), 17(08), 100–112. https://doi.org/10.3991/ijim.v17i08.39215
- Jariyah, A., Puspitaningtyas, A. R., & Husein, Ach. M. (2024). Pengaruh media interaktif animasi terhadap minat belajar pada mata pelajaran IPA siswa kelas IV di SDN 1 Tribungan Kecamatan Mlandingan tahun akademik 2022/2023. *Cendekia Pendidikan*, 3(1), 9. https://doi.org/10.36841/cendekiapendidikan.v3i1.4116
- Jeno, L. M., Adachi, P. J. C., Grytnes, J., Vandvik, V., & Deci, E. L. (2019). The effects of m-learning on motivation, achievement and well-being: A self-determination theory approach. *British Journal of Educational Technology*, 50(2), 669–683. https://doi.org/10.1111/bjet.12657
- Juhji, J., Jannah, M., & Saefurohman, A. (2022). Development of holistic-based science learning videos: An effort to improve affective skills of madrasah ibtidaiyah students. *Jurnal Tarbiyah*, 29(2), 325–339. http://dx.doi.org/10.30829/tar.v29i2.1847
- Junita, S., Zaini, Z. A. H., Muhith, A., & Ghani, M. F. A. (2024). Implementation of the Trilogy concept: Improving student quality and education standards at the Islamic education foundation. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 10(01), 63–76. <u>https://doi.org/10.32678/tarbawi.v10i02.9507</u>
- Kim, J., Ham, Y., & Lee, S.-S. (2024). Differences in student-AI interaction process on a drawing task: Focusing on students' attitude towards AI and the level of drawing skills. Australasian Journal of Educational Technology. https://doi.org/10.14742/ajet.8859
- Kinaya, A., Ari Suriani, & Sahrun Nisa. (2024). Pengaruh media interaktif animasi terhadap minat belajar pada mata pelajaran IPA di sekolah dasar. Journal of Practice Learning and Educational Development, 4(2), 88–94. https://doi.org/10.58737/jpled.v4i2.281
- Kirschner, P. A., & Van Merriënboer, J. J. G. (2013). Do learners really know best? Urban legends in education. *Educational Psychologist*, 48(3), 169–183. <u>https://doi.org/10.1080/00461520.2013.804395</u>
- Kolås, L. (2015). Application of interactive videos in education. 2015 International Conference on Information Technology Based Higher Education and Training (ITHET), 1–6. <u>https://doi.org/10.1109/ITHET.2015.7218037</u>
- Kruger, J.-L., & Doherty, S. (2016). Measuring cognitive load in the presence of educational video: Towards a multimodal methodology. *Australasian Journal* of Educational Technology, 32(6). <u>https://doi.org/10.14742/ajet.3084</u>
- Lestari, N., & Wirasty, R. (2019). Pemanfaatan multimedia dalam media pembelajaran interaktif untuk meningkatkan minat belajar siswa. *Amaliah: Jurnal Pengabdian Kepada Masyarakat, 3*(2), 349–353. <u>https://doi.org/10.32696/ajpkm.v3i2.289</u>
- Lin, M.-H., Chen, H.-C., & Liu, K.-S. (2017). A study of the effects of digital learning on learning motivation and learning outcome. *Eurasia Journal of Mathematics*,

Science and Technology Education, 13(7), 3553–3564. https://doi.org/10.12973/eurasia.2017.00744a

- Lukita, H., Sujana, Y., & Budiyanto, C. (2017). Can interactive learning improve learning experience? A systematic review of the literature. International Conference on Teacher Training and Education 2017 (ICTTE 2017), 495–500. https://doi.org/10.2991/ICTTE-17.2017.56
- Mayer, R. E. (2005). In *Cognitive theory of multimedia learning*. Cambridge University Press.
- Mayer, R. E. (2022). The future of multimedia learning. The Journal of Applied Instructional Design, 11(4), 69–77. <u>https://doi.org/10.59668/423.10349</u>
- Menacho-Vargas, I., Rojas, M. L. R., García, U. C., Aybar, H. N. C., & Washington, D. S. (2022). Canva and collaborative learning in virtual environments with students from the private universities of lima-peru. *NeuroQuantology*, 20(5), 626. <u>https://doi.org/10.14704/nq.2022.20.5.nq22217</u>
- Mou, Z., & Damhuri, D. (2023). The Effect of interactive video learning media on the motivation of arabic language learning of class VIII students of MTs Al-Khairat Paguyaman. Al-Kalim: Jurnal Pendidikan Bahasa Arab dan Kebahasaaraban, 2(1), 14–28. https://doi.org/10.60040/jak.v2i1.15
- Mukaromah, N. H., Fuadi, A., & Daryono, R. W. (2024). Assessing the impact of principal leadership and teacher performance on educational quality: The role of TQM as a mediator. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 10(01), 145–160. <u>https://doi.org/10.32678/tarbawi.v10i01.9991</u>
- Napitupulu, F. H. S. (2021). Pengembangan media video animasi berrbasis powtoon terhadap minat belajar matematika siswa kelas IV SD Negeri 102019 Firdaus. *Education Achievement: Journal of Science and Research*, 10–20. <u>https://doi.org/10.51178/jsr.v2i1.332</u>
- Nicolaou, C., Matsiola, M., & Kalliris, G. (2019). Technology-enhanced learning and teaching methodologies through audiovisual media. *Education Sciences*, 9(3), 196. <u>https://doi.org/10.3390/educsci9030196</u>
- Nuralyanti, P. (2023). Revitalisasi pembelajaran: Solusi terhadap rendahnya minat belajar peserta didik kelas V SDN Sumber Agung. *Didaktik: Jurnal Ilmiah PGSD* STKIP Subang, 9(5), 2406-2418. https://doi.org/10.36989/didaktik.v9i5.2207
- Nurmayuli, N. (2023). Development of an Islamic education management philosophy e-module through the canva application. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan, 9*(01), 97–108. <u>https://doi.org/10.32678/tarbawi.v9i01.7963</u>
- Nurpiani, R., Anggraeni, S. R., & Farhurohman, O. (2024). Penggunaan media canva untuk meningkatkan minat belajar siswa kelas III sekolah dasar. Al-Madrasah: Jurnal Ilmiah Pendidikan Madrasah Ibtidaiyah, 8(3), 1172–1180. <u>http://dx.doi.org/10.35931/am.v8i3.3561</u>
- Ploetzner, R., Berney, S., & Bétrancourt, M. (2020). A review of learning demands in instructional animations: The educational effectiveness of animations unfolds if the features of change need to be learned. *Journal of Computer Assisted Learning*, 36(6), 838–860. <u>https://doi.org/10.1111/jcal.12476</u>
- Pramono, A., Tama, T. J. L., & Waluyo, T. (2021). Analisis arus tiga fasa daya 197 KVA dengan menggunakan metode uji normalitas Kolmogorov-smirnov. *Jurnal RESISTOR (Rekayasa Sistem Komputer)*, 4(2), 213–216. <u>https://doi.org/10.31598/jurnalresistor.v4i2.696</u>

- Prasong, F., Kalang, F., & Nurlailah. (2022). Pengembangan media video animasi interaktif untuk meningkatkan minat membaca dengan tema kegemaranku pada siswa kelas 1 MIS Al-Fitrah Oesapa. Jurnal Pendidikan Dasar Flobamorata, 3(1), 276–280. <u>https://doi.org/10.51494/jpdf.v3i1.665</u>
- Pulungan, A., Harumy, T. H. F., Manik, F. Y., Ginting, D. S. B., Purnamasari, F., Selvida, D., Nababan, A. M., Nasution, U. R. P., & Nuzuliati, N. (2022).
  Pembuatan media pembelajaran interaktif canva bersama guru Yayasan Harum Sentosa sebagai upaya meningkatkan minat belajar siswa. Jurnal Pengabdian Kepada Masyarakat Nusantara, 3(2), 483–488. https://doi.org/10.55338/jpkmn.v3i2.372
- Purba, Y. A., & Harahap, A. (2022). Pemanfaatan aplikasi canva sebagai media pembelajaran matematika di SMPN 1 NA IX-X Aek Kota Batu. Jurnal Cendekia: Jurnal Pendidikan Matematika, 6(2), 1325–1334. https://doi.org/10.31004/cendekia.v6i2.1335
- Ramdani, N. S., Nugraha, H., & Hadiapurwa, A. (2021). Potensi pemanfaatan media sosial tiktok sebagai media pembelajaran dalam pembelajaran daring. *Akademika*, 10(02), 425–436. https://doi.org/10.34005/akademika.v10i02.1406
- Renaldi, D., Edy, Pataropura, A., Subhana, M., Edward Edison, Andrian Febri Handoko, Rafael Ferdianto, & Matthew L.F. Korompis. (2024). Implementasi media pembelajaran menggunakan canva bagi guru sekolah. Abdi Dharma, 4(1), 53–62. <u>https://doi.org/10.31253/ad.v4i1.2783</u>
- Sari, H. R., & Yatri, I. (2023). Video animasi melalui aplikasi canva untuk meningkatkan minat belajar bahasa Indonesia siswa sekolah dasar. *Edukasiana: Jurnal Inovasi Pendidikan, 2*(3), 159–166. <u>https://doi.org/10.56916/ejip.v2i3.381</u>
- Sari, N. R. (2018). Animation media to improve student learning results. *Jurnal Tadris Matematika*, 1(2), 145–156. <u>https://doi.org/10.21274/jtm.2018.1.2.145-156</u>
- Shabiralyani, G., Hasan, K. S., Hamad, N., & Iqbal, N. (2015). Impact of visual aids in enhancing the learning process case research: District Dera Ghazi Khan. *Journal of Education and Practice*, 6(19), 226–233.
- Soidik, A., Solichin, E., & Safitri, E. (2020). Perbedaan metode pembelajaran kooperatif tipe problem based learning dengan metode konvensional terhadap hasil belajar IPS terpadu kelas XII SMK Negeri 10 Merangin. Jurnal Muara Pendidikan, 5(1), 602–608. <u>https://doi.org/10.52060/mp.v5i1.276</u>
- Solas, E., & Sutton, F. (2018). Incorporating digital technology in the general education classroom. *Research in Social Sciences and Technology*, 3(1), 1–15. <u>https://doi.org/10.46303/RESSAT.03.01.1</u>
- Sunami, M. A., & Aslam, A. (2021). Pengaruh penggunaan media pembelajaran video animasi berbasis zoom meeting terhadap minat dan hasil belajar IPA siswa sekolah dasar. *Jurnal Basicedu*, 5(4), 1940–1945. <u>https://doi.org/10.31004/basicedu.v5i4.1129</u>
- Susanti, S., Putu Ida Arsani Dewi, Nanda Saputra, Atika Kumala Dewi, Fajar Wulandari, Retno Novitasari Kusumawardan, Ihwan Rahman Bahtiar, & Makherus Sholeh. (2022). *Desain Media Pembelajaran SD/MI*. Yayasan Penerbit Muhammad Zaini.
- Susila, H., Muslim, S., & Syahrial, Z. (2019). Interactive multimedia to enhance students' engagement. *Proceedings of the International Conference of Science and Technology for the Internet of Things*. International Conference of Science

and Technology for the Internet of Things, Yogyakarta, Indonesia. http://dx.doi.org/10.4108/eai.19-10-2018.2281286

- Sutarman, S., Edi Hermawan, H., & Ahmad, A. (2017). Character education to build personal learners tough. *IOSR Journal of Research & Method in Education (IOSRJRME)*, 7(1), 59–63. <u>https://doi.org/10.9790/7388-0701055963</u>
- Sweller, J. (2020). Cognitive load theory and educational technology. *Educational Technology Research and Development*, 68(1), 1–16. https://doi.org/10.1007/s11423-019-09701-3
- Triarisanti, R., & Purnawarman, P. (2019). The influence of interest and motivation on college students'language and art appreciation learning outcomes. *International Journal of Education*, 11(2), 130–135. <u>https://doi.org/10.17509/ije.v11i2.14745</u>
- Utami, S., Jayanti, J., & Selegi, S. F. (2023). Pengaruh media pembelajaran interaktif animasi terhadap minat belajar pada mata pelajaran IPS di SD Negeri 3 Tanjung Lago. *JPDI (Jurnal Pendidikan Dasar Indonesia)*, 8(1), 21. <u>https://doi.org/10.26737/jpdi.v8i1.3758</u>
- Uyun, M., Bahriah, Y., & Fitriani, F. (2022). Interest and learning motivation with student participation. *Psikoislamedia: Jurnal Psikologi*, 7(2), 119–133. https://doi.org/10.22373/psikoislamedia.v7i2.13794
- Virdi, S., Khotimah, H., & Dewi, S. (2023). Sosiologi pendidikan dalam pembentukan karakter peserta didik di sekolah. Protasis: Jurnal Bahasa, Sastra, Budaya, Dan Pengajarannya, 2(1), 162–177. https://doi.org/10.55606/protasis.v2i1.86
- Wahyudi, W. (2022). Metode penelitian kuantitatif dan kualitatif. CV. Tohar Media.
- Wardana, A., Ramadhan, M. R., Aznur, M., Putri, R. A., & Ikhwan, A. (2023). Media pembelajaran multimedia interaktif menggunakan metode MDLC pada zoom meetings. Jurnal Penelitian Dan Pengkajian Ilmiah Eksakta, 2(1), 25–29. https://doi.org/10.47233/jppie.v2i1.677
- Waruwu, A., B., C., & Sitinjak, D. (2022). Penggunaan multimedia interaktif dalam meningkatkan minat belajar siswa pada pembelajaran kimia. Jurnal Pendidikan MIPA, 12(2), 298–305. <u>https://doi.org/10.37630/jpm.v12i2.589</u>
- Wibowo, H. S. (2023). Pengembangan teknologi media pembelajaran: merancang pengalaman pembelajaran yang inovatif dan efektif. Tiram Media.
- Wibowo, T., Johansyah, R., & Astrina, V. (2022). Efektifitas aplikasi canva untuk meningkatkan motivasi belajar siswa masa kini. *J-Simbol: Jurnal Magister Pendidikan Bahasa Dan Sastra Indonesia*, 10(2 Sep). https://doi.org/10.23960/j-simbol/v10i2.2022.08
- Widayanti, I., & Juhji, J. (2023). Developing STEM-based powtoon animation videos to enhance critical thinking skills in elementary school students. *Journal of Integrated Elementary Education*, 3(2), 98–108. <u>https://doi.org/10.21580/jieed.v3i2.17483</u>
- Widiarti, M., Laksono, K., & Amri, M. (2024). Penggunaan dampak positif terhadap eksplorasi kreativitas literasi digital painting canva pembelajaran puisi kelas
  5 SDN Gondek. Cetta: Jurnal Ilmu Pendidikan, 7(1), 14–21. https://doi.org/10.37329/cetta.v7i1.2965
- Wulandari, D., Risdianto, E., & Setiawan, I. (2022). Development of E-module materials of quantities and units using canva to increase students' interest in learning. JENTIK: Jurnal Pendidikan Teknologi Informasi Dan Komunikasi, 1(1), 25–34. <u>https://doi.org/10.58723/jentik.v1i1.27</u>

- Yuniarti, A., Titin, T., Safarini, F., Rahmadia, I., & Putri, S. (2023). Media konvensional dan media digital dalam pembelajaran. Jutech: Journal Education and Technology, 4(2), 84–95. <u>https://doi.org/10.31932/jutech.v4i2.2920</u>
- Zenki-Dalipi, A., & Osmani, R. (2022). The positive influence of images and graphics presentations in teaching texts for keeping students'attention and concentration. *Knowledge-International Journal*, 54(5), 751–756. <u>https://doi.org/10.35120/kij5405751z</u>