



The Effectiveness of Web-Based Art Culture Multimedia in Cultural Arts Learning for Class VIII at Mts Negeri 1 Sidenreng Rappang

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Abstract

Penelitian ini mengkaji efektivitas penggunaan multimedia Art Culture berbasis web dalam meningkatkan pembelajaran seni budaya pada siswa kelas VIII di MTs Negeri 1 Sidenreng Rappang. Penelitian ini menggunakan pendekatan eksperimen dengan desain one-group pretest-posttest. Peserta penelitian berjumlah 31 siswa dari kelas VIII.A, yang dipilih melalui teknik random sampling. Data dikumpulkan melalui tes pilihan ganda dan kuesioner, yang bertujuan untuk mengevaluasi hasil belajar siswa, baik dari segi ketuntasan belajar maupun efisiensi waktu dalam menerima materi. Hasil penelitian menunjukkan adanya peningkatan yang signifikan pada hasil belajar siswa setelah penggunaan platform multimedia Art Culture. Uji paired sample t-test menunjukkan perbedaan signifikan antara nilai pretest dan posttest, dengan rata-rata nilai pretest sebesar 45,80 dan rata-rata nilai posttest sebesar 83,11. Hal ini menunjukkan bahwa penggunaan multimedia Art Culture efektif dalam meningkatkan pemahaman dan keterlibatan siswa dalam pembelajaran seni budaya. Temuan dari penelitian ini memberikan wawasan yang berharga mengenai integrasi media digital dalam meningkatkan proses pembelajaran di sekolah.

Kata Kunci: Multimedia, Art Culture, Efektivitas, Pembelajaran Seni Budaya, Pembelajaran Berbasis Web.

Abstract

This research examines the effectiveness of web-based Art Culture multimedia in enhancing cultural arts learning for eighth-grade students at MTs Negeri 1 Sidenreng Rappang. The study was conducted using an experimental approach with a one-group pretest-posttest design. The participants of the study were 31 students from class VIII.A, selected through random sampling. Data was collected through multiple-choice tests and questionnaires, aimed at evaluating students' learning outcomes, both in terms of learning completeness and the time efficiency in receiving the material. The results indicated a significant improvement in students' learning outcomes after the use of the multimedia Art Culture platform. The paired sample t-test showed a significant difference between the pretest and posttest scores, with a mean score of 45.80 for the pretest and 83.11 for the posttest. This suggests that the use of Art Culture multimedia is effective in improving students' understanding and engagement in cultural arts education. The findings of this research provide valuable insights into the integration of digital media in enhancing the learning process in schools.

Keywords: Multimedia, Art Culture, Effectiveness, Cultural Arts Learning, Web-Based Education.

INTRODUCTION

Education plays a crucial role in the development of a nation and human civilization. In Indonesia, the goal of national education is outlined in the Republic of Indonesia Law Number 20 of 2003 on the National Education System, which emphasizes that education aims to develop the potential of students to become individuals who are devoted to God, noble, healthy, knowledgeable, capable, independent, and responsible citizens. Therefore, it is essential for the education system to continue innovating in its teaching methods and media to meet the demands of an ever-evolving world. One of the major challenges faced by education in Indonesia is the implementation of teaching methods that align with technological advancements. The education sector is confronted with the digital era, which requires significant changes and developments in teaching media. In the era of Society 5.0, which integrates physical and digital worlds, the use of technology-based teaching media becomes essential to support more effective and efficient learning. In this context, multimedia usage in education provides a solution to create more engaging, interactive, and accessible learning experiences for students.

Cultural Arts education is a subject that requires a more creative and innovative approach. This subject not only teaches students about art knowledge but also develops their practical skills in creating works of art. Therefore, Cultural Arts education needs to be presented in a way that is both engaging and aligned with technological advancements to motivate students to be more active and involved in the learning process. One of the ways to improve the effectiveness of Cultural Arts education is by utilizing web-based multimedia. Multimedia Art Culture is a form of web-based teaching media that

combines various multimedia elements, such as text, images, audio, and video, to deliver educational content. Art Culture aims to provide interactive learning materials that are easily accessible by students. By using Art Culture, students are expected to learn independently, access materials anytime and anywhere, and interact with engaging content such as video tutorials, images, and interactive quizzes. Therefore, this study aims to examine the effectiveness of using web-based Art Culture multimedia in improving student learning outcomes in Cultural Arts education at MTs Negeri 1 Sidenreng Rappang.

Web-based learning is becoming increasingly popular around the world, including in Indonesia. The existence of web-based learning platforms allows students to engage in online learning, which is highly relevant in today's technological age. In this digital era, learning is no longer limited to face-to-face meetings in classrooms but can be conducted flexibly using online media that provide a variety of learning resources. Therefore, using Art Culture as a web-based learning media is expected to address these needs by providing students easy access to learn about cultural arts in a more engaging and interactive way.

MTs Negeri 1 Sidenreng Rappang, as an educational institution in Sidenreng Rappang District, South Sulawesi, faces the challenge of continuously improving the quality of education, especially in the subject of Cultural Arts. Based on initial observations made by the researcher, it was found that the teaching methods used at the school were still largely conventional, relying mostly on lectures and demonstrations. This resulted in students feeling bored and less engaged in the learning process. Moreover, the limited facilities and infrastructure further hindered the delivery of engaging and interactive

educational content. To address these challenges, the integration of technology in teaching has become a potential solution to enhance the quality of education. Multimedia Art Culture, as a web-based learning media, can provide a solution to improve the effectiveness of Cultural Arts education. By utilizing this technology, students are expected to become more actively involved in the learning process, feel motivated, and have a better understanding of the material taught by the teacher.

The aim of this study is to determine the effectiveness of using web-based Art Culture multimedia in Cultural Arts education for eighth-grade students at MTs Negeri 1 Sidenreng Rappang. This research will measure how the use of this media can improve students' learning outcomes, both in terms of learning completeness and understanding of the material being taught. Therefore, the results of this study are expected to contribute to the educational field by enhancing the quality of learning through the effective utilization of available technologies.

Web-based multimedia learning offers several advantages, including the ability to present content in a more engaging way, facilitating independent learning, and increasing interaction between students and learning materials. By using Art Culture, students not only receive content visually but can also access a variety of other learning media that can enrich their understanding. For example, students can watch videos on cultural arts, listen to audio explanations, and participate in interactive quizzes or exercises that help them comprehend the concepts being taught. Through this study, the researcher aims to evaluate whether the use of web-based multimedia Art Culture can have a positive impact on students' learning outcomes. This research also seeks to provide insight into how technology can be utilized in Cultural Arts education and how

it can overcome the limitations of conventional teaching methods. Additionally, this study aims to offer recommendations for developing web-based learning media in other schools facing similar challenges. Given the above explanation, this study is expected to provide new insights regarding the effectiveness of technology in Cultural Arts education and its contribution to enhancing educational quality at MTs Negeri 1 Sidenreng Rappang.

METHOD

This study employs a quantitative experimental design with a one-group pretest-posttest approach to assess the effectiveness of web-based Art Culture multimedia in enhancing Cultural Arts learning outcomes among eighth-grade students at MTs Negeri 1 Sidenreng Rappang. The design allows the researcher to measure the changes in student learning before and after the use of Art Culture multimedia. This design is appropriate for determining the causal effect of the intervention on students' learning outcomes, as it allows for direct comparison between pretest and posttest scores. The participants in this study consist of 31 eighth-grade students from class VIII.A at MTs Negeri 1 Sidenreng Rappang. These students were selected through random sampling, ensuring a diverse representation of the student population. The sample size of 31 students is considered adequate for the purposes of this research, enabling meaningful statistical analysis while keeping the study manageable in terms of time and resources. The students are aged between 13 and 14 years old and are enrolled in Cultural Arts education, which covers various topics such as music, dance, visual arts, and drama.

Data collection for this study involves three main methods: pretest and posttest

assessments, a questionnaire, and classroom observations. The pretest is administered before the intervention, designed to assess students' baseline knowledge of the subject. The posttest, administered after the intervention, is used to measure students' learning gains. Both tests consist of 30 multiple-choice questions, each worth one point. The total score is converted to a percentage, with a maximum possible score of 100. The questionnaire is distributed to the students to gather their feedback on the effectiveness of Art Culture multimedia in the learning process. It includes questions about the usability of the platform, students' engagement, and how well the multimedia content helped them understand the subject matter. The responses provide valuable qualitative data on students' perceptions and attitudes toward the use of multimedia in their learning experience. In addition to the pretest and posttest, the questionnaire helps to assess the students' level of motivation and interest in the subject after the intervention. Classroom observations are another crucial data collection method in this study. The researcher observes students' interactions with the Art Culture multimedia during the learning process. This observation helps to assess the level of student engagement, participation, and behavior when using the multimedia content. The researcher takes notes on whether students are actively involved in the learning process, how they interact with the multimedia content, and whether they show signs of increased motivation or interest in the subject.

Data analysis for this study involves both quantitative and qualitative methods. The pretest and posttest results are analyzed using descriptive statistics, such as mean scores and standard deviations, to summarize the students' performance before and after the intervention. To test the significance of the differences between pretest and posttest scores, a paired sample t-test is conducted. A p-value of less than

0.05 indicates that the difference between the two sets of scores is statistically significant, suggesting that the intervention had a meaningful impact on students' learning outcomes.

The responses from the questionnaire are analyzed using thematic analysis, which involves identifying patterns and themes within the students' feedback. This analysis helps to understand students' perceptions of the multimedia tool, including its strengths and areas for improvement. Classroom observation data is also analyzed qualitatively, with the researcher identifying any changes in student behavior, such as increased engagement and active participation, that might be attributed to the use of multimedia. Ethical considerations are an essential aspect of this study. Prior to data collection, informed consent is obtained from both the students and their parents or guardians. Students are informed about the purpose of the study and their right to participate voluntarily. The confidentiality of student responses is ensured throughout the study, and no student is required to participate against their will. The intervention is designed to enhance students' learning experience without disrupting their regular classroom activities. The ethical guidelines ensure that the study adheres to established standards for conducting research in educational settings.

RESULT AND DISCUSSION

This section presents the findings from the study on the effectiveness of web-based Art Culture multimedia in improving the learning outcomes of eighth-grade students at MTs Negeri 1 Sidenreng Rappang. The data collected through pretest and posttest scores, as well as student feedback from questionnaires and classroom observations, will be discussed in detail. The analysis aims to provide insights into the impact of the Art Culture multimedia tool on students'

academic performance and engagement in Cultural Arts education. The primary data for this study came from the pretest and posttest scores, which were used to evaluate the effectiveness of the Art Culture multimedia tool. The pretest scores represent the students' knowledge before the use of the multimedia tool, while the posttest scores represent their knowledge after the intervention.

From the data, we can observe a significant improvement in the students' performance between the pretest and posttest. The mean score for the pretest was 47.1%, while the mean score for the posttest was 83.4%. This indicates a substantial increase in student learning outcomes after using the multimedia tool. The standard deviation for the pretest was 11.32, while for the posttest it was 4.83, indicating that the scores were more consistent after the intervention compared to before. The reduction in the standard deviation suggests that the multimedia tool helped students achieve a more uniform understanding of the material.

The bar chart below illustrates the comparison of pretest and posttest scores. As shown, the posttest scores are significantly higher than the pretest scores, confirming the positive impact of the Art Culture multimedia on students' learning outcomes. To statistically verify the observed difference between the pretest and posttest scores, a paired sample t-test was conducted. This test compares the means of two related groups (pretest and posttest scores) to determine whether the differences are statistically significant.

The results of the paired sample t-test indicated a statistically significant difference between the pretest and posttest scores. The p-value obtained from the test was less than 0.05, which means that the null hypothesis (i.e., no significant difference) was rejected. This supports the conclusion that the use of web-based Art Culture multimedia had a significant positive effect on students'

learning outcomes in Cultural Arts. In addition to the quantitative data from the pretest and posttest, student feedback was gathered through questionnaires to assess their perceptions of the Art Culture multimedia tool. The questionnaire was designed to gather information on students' engagement with the multimedia platform, the usability of the tool, and how well it supported their learning.

The majority of students reported that they found the Art Culture platform easy to use and engaging. Many students mentioned that the multimedia content, including videos and interactive quizzes, helped them better understand complex concepts in Cultural Arts. The interactivity of the platform was cited as a major factor that kept students motivated and focused during the lessons. Furthermore, students appreciated the flexibility of being able to access the learning materials at any time, which allowed them to learn at their own pace. Classroom observations also supported the findings from the questionnaire. The researcher observed that students were more engaged and actively participated in the lessons when multimedia content was used. Unlike traditional teaching methods, which often led to passive learning, the use of Art Culture multimedia encouraged students to interact with the content, ask questions, and collaborate with their peers. This increased engagement likely contributed to the improvement in their learning outcomes, as indicated by the significant increase in posttest scores.

The improvement in students' learning outcomes can be attributed to several factors related to the use of multimedia. One of the main advantages of multimedia is its ability to present complex information in a variety of formats, such as text, images, audio, and video. This multimodal approach caters to different learning styles and helps students process information more effectively. For example, visual learners may benefit from the images and videos, while auditory

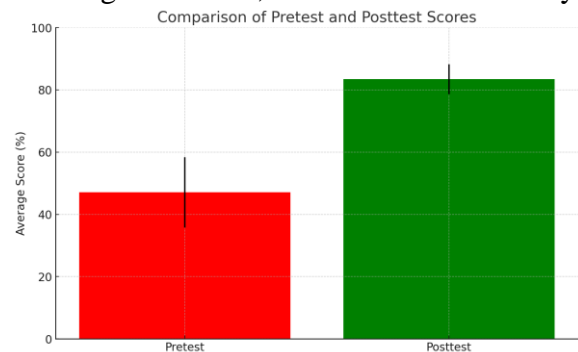
learners may find the audio explanations helpful. The interactive quizzes also provided students with immediate feedback, allowing them to assess their understanding and reinforce their learning.

Another factor contributing to the improvement in learning outcomes is the flexibility offered by the web-based platform. Unlike traditional classroom settings, where students may feel pressured to keep up with the pace of the lesson, Art Culture allowed students to learn at their own pace. They could revisit the material as needed, which helped reinforce their understanding of the topics. This self-paced learning likely contributed to the increase in students' performance from the pretest to the posttest.

Moreover, the use of Art Culture multimedia allowed students to engage with the material in a more dynamic and interactive way. Traditional teaching methods, such as lectures and demonstrations, often result in passive learning, where students are less involved in the learning process. In contrast, multimedia tools encourage active participation, which has been shown to enhance retention and understanding of the material. This active learning environment likely played a key role in the significant improvement in students' test scores. While the results of this study are promising, it is important to acknowledge some limitations and challenges that may have impacted the outcomes. One of the main limitations is the relatively small sample size of 31 students. Although this sample size is adequate for the purposes of the study, a larger sample size would provide more generalizable results. Future research could involve a larger and more diverse sample to validate the findings of this study.

Another limitation is the short duration of the intervention. The study was conducted over a limited period, and the students were

only exposed to the multimedia tool for a short time. A longer intervention period might allow for a deeper exploration of the effectiveness of the multimedia tool and its impact on long-term learning outcomes. Additionally, the study focused solely on students' academic performance, and future research could also explore other outcomes, such as students' motivation, critical thinking skills, and creativity.



CONCLUSION

the findings of this study strongly support the effectiveness of web-based Art Culture multimedia in enhancing students' learning outcomes in Cultural Arts education at MTs Negeri 1 Sidenreng Rappang. The significant increase in students' pretest and posttest scores, coupled with positive feedback from students and classroom observations, indicates that multimedia-based learning can improve students' engagement, understanding, and academic performance.

The pretest and posttest results clearly demonstrated a considerable improvement in students' learning outcomes, with a mean increase of over 30%. This improvement is further substantiated by the reduction in standard deviation in the posttest scores, suggesting that students were able to grasp the material more uniformly after the intervention. The statistical analysis through paired sample t-tests confirmed that the observed differences in scores were statistically significant, reinforcing the hypothesis that web-based Art Culture multimedia positively impacts student learning. The students' feedback collected through questionnaires and observations revealed that the Art Culture multimedia platform was well-received by the students. Many students reported that the multimedia content, which included videos, interactive quizzes, and visual aids, made the learning process more enjoyable and effective. The flexibility of accessing the learning materials online allowed students to study at their own pace, which contributed to their increased motivation and engagement. These findings highlight the potential of multimedia to make learning more accessible and engaging, which is particularly important in a subject like Cultural Arts that requires creativity and active participation.

Additionally, the classroom observations demonstrated that students were more engaged and participated actively when the Art Culture multimedia was used, compared to traditional teaching methods. The interactive nature of the platform encouraged students to ask questions, engage in discussions, and work together on assignments. This active learning environment played a crucial role in improving students' understanding and retention of the material.

While the results of this study are promising, it is important to acknowledge some limitations, including the small sample size and the short duration of the intervention. Future studies with larger sample sizes and longer intervention periods would provide more robust data and a deeper understanding of the long-term effects of multimedia-based learning. Moreover, exploring other factors, such as students' motivation, creativity, and critical thinking skills, could offer a more comprehensive view of the benefits of multimedia in education. In light of the positive results observed in this study, it is recommended that educators and schools incorporate web-based multimedia tools like Art Culture into their teaching practices. The integration of multimedia in the classroom not only enhances students' learning experiences but also prepares them for the digital age, where technology plays an increasingly important role in everyday life. The use of multimedia in Cultural Arts education, in particular, offers an exciting opportunity to engage students in creative and interactive learning, making it a valuable addition to educational practices. Overall, this study contributes to the growing body of research on the effectiveness of multimedia in education, particularly in the context of Cultural Arts. The results suggest that multimedia tools, when used effectively, can enhance the quality of education, improve learning outcomes, and foster a more engaging and interactive classroom environment.

REFERENCES

1. Afrijhon, N. S. (2021). Desain Multimedia Interaktif Menggunakan Software Adobe Flash Professional CS5.5 Pada Materi Gelombang. *1*, 1–6.
2. Anjeliani, A., Lamanna, N., & Takdir, M. (2022). Development of Web-Based Pascal Programming Multimedia at UPT SMK Negeri 2 Sidrap. *Edumaspul: Jurnal Pendidikan*, 6(2), 3160–3165. <https://doi.org/10.33487/edumaspul.v6i2.4159>
3. Arifin, Z. (2012). Evaluasi Pembelajaran. In *Evaluasi Pembelajaran*.
4. Baharuddin, M. R., & Hardianto. (2019). Efektifitas Penerapan Model Pembelajaran PAIKEM Gembrot terhadap Peningkatan Hasil Belajar Mahasiswa pada Mata Kuliah Pembelajaran Matematika Sekolah Dasar Pendahuluan. *2*.
5. Basam, F. (2022). Motivasi Dan Hasil Belajar IPA Siswa Kelas VII Dalam Pembelajaran Model Kooperatif Numbered Heads Together. *Jurnal Riset Pendidikan Dasar*, 05(1), 100–106.
6. Coring, F. B. (2019). Pengaruh Penggunaan Multimedia Terhadap Hasil Belajar Siswa Kelas IV Pada Mata Pelajaran Bahasa Inggris Kurikulum Cambridge Di Sekolah Dasar Khadijah Surabaya. 8–19.
7. Dewi, E. M. (2022). Pengembangan Google Site Sebagai Media Unisono Di Kelas Vii Smp Islam Pariskian Kota Serang. *7(1)*, 23–37.
8. Fanani, I., Djati, S. P., & Silvanita, K. (2017). Pengaruh Kepuasan Kerja dan Komitmen Organisasi Terhadap Organizational Citizenship Behavior. *9220(1)*, 40–53.
9. Ferismayanti. (2012). Mengoptimalkan Pemanfaatan Google Sites dalam Pembelajaran Jarak Jauh Oleh: Ferismayanti, M.Pd. 1–12.
10. Hamdan, B. H. (2020). Media Pembelajaran Efektif (Issue November). *Fatawa Publising*. https://www.google.co.id/books/editon/Media_Pembelajaran_Efektif/pBgJE_AAAQBAJ?hl=en&gbpv=1&dq=video+pembelajaran&pg=PA166&printsec=frontcover
11. Hasan, M., Milawati, M., Darodjat, D., Harahap, T. K., Tahrim, T., Anwari, A. M., Rahmat, A., Masdiana, M., & Indra, I. (2021). *Media Pembelajaran*. Tahta Media Group.
12. Kartono. (2017). Tinjauan Tentang Guru Dalam Memotivasi Siswa Untuk Mempelajari Pendidikan Kewarganegaraan. *4(3)*, 241–250.
13. Muhammad Takdir, T., Zulkifli, & Ferdiansyah, H. (2023). This work is licensed under a Creative Commons Attribution- ShareAlike 4 .0 International License. *45(1)*, 1–17.
14. Mulyana, E., Dahlena, A., Tetep, Rohman, S. N., Widyanti, T., Suherman, A., Dianah, L., Uno, I. C., & Rostiani, A. (2023). Efektifitas Media Pembelajaran Powtoon untuk Meningkatkan Hasil Belajar IPS. *JIPSINDO (Jurnal Pendidikan Ilmu Pengetahuan Indonesia)*, 10(1), 1–9. <https://doi.org/10.21831/jipsindo>.
15. Musyaffa' Rafif Naufal, & Hindun Hindun. (2023). Efektivitas Multimedia dalam Pembelajaran Interaktif Berbasis Kurikulum Merdeka di Kelas IX SMPN 25 Tangerang. *Sinar Dunia: Jurnal Riset Sosial Humaniora Dan Ilmu Pendidikan*, 3(1), 56–63. <https://doi.org/10.58192/sidu.v3i1.1737>
16. Noviano, F. G., Riyanto, Y., & Setyaedhi, H. S. (2023). Efektivitas

- Penggunaan Media E-Learning Berbasis Google Sites Dalam Pembelajaran Fotografi. *Akademika*, 12(01), 39–46.
<https://doi.org/10.34005/akademika.v12i01.2670>
17. Pagarra H & Syawaludin, D. (2022). *Media Pembelajaran*. In Badan Penerbit UNM.
18. Pubian, Y. M., & Herpratiwi, H. (2022). Penggunaan Media Google Site Dalam Pembelajaran Untuk Meningkatkan Efektifitas Belajar Peserta Didik Sekolah Dasar. *Akademika*, 11(01), 163–172.
<https://doi.org/10.34005/akademika.v11i01.1693>
19. Rizal, I., Waskito, & Yufrizal A. (2023). Efektivitas Media Pembelajaran Google Sites Untuk Meningkatkan Minat Belajar Mata Pelajaran Mesin Bubut Smk Negeri 1 Padang the Effectiveness of the Google Sites Learning Media To Increase Learning Interest in Lathe Machine Lessons Smk Negeri 1 Padang. *VOMEK Jurnal Vokasi Mekanika*, 5(1), 12.
<http://vomek.ppj.unp.ac.id/index.php/vomek/article/view/479/253>
20. Rosdianto, H., Murdani, E., & Hendra. (2020). Implementasi Model Pembelajaran POE (Predict Observe Explain) Untuk Meningkatkan Pemahaman Konsep Siswa Pada Materi Hukum Newton. *6(1)*, 55–57.
21. Suwandi, M. I. (2019). Keefektifan Media Powtoon Dalam Pembelajaran IPA Ditinjau Dari Minat Dan Hasil Belajar Pada Siswa Kelas V SD. *8(01)*, 28–34.
22. Syamsunir, Ruslan, & Pattaufi. (2020). Pengembangan Video Tutorial Pembelajaran Mata Kuliah Produksi Media Audio Video. *UNM Jurnal*, 1–8.
23. Syamsunir, Zain, S., Sari, W., & Muhammadiyah. (2023). Pengaruh Penggunaan Aplikasi Quizizz Siswa Kelas X Smk Muhammadiyah. *01*, 1–8.
24. UU No 20-2003. (2003).
25. Yahdi Kusnadi, M. (2016). *Paradigma* Vol. XVIII. No.2 September 2016 Pengaruh Keterimaan Aplikasi Pendaftaran Online Terhadap Jumlah Pendaftar Di Sekolah Dasar Negeri Jakarta. *Paradigma*, XVIII(2), 89–101.