
Developing Learning Media Using Canva and Wordwall Application for the History of Pancasila Fourth Grade in Elementary School

Febriani Pige Dangu¹, Moh. Farid Nurul Anwar^{2*}, Chusnul Chotimah³, Siti Ni'matul Fitriyah⁴

^{1,2,3,4}Elementary School Teacher Education, Educational Sciences, Tribhuwana Tungadewi University Jl. Telaga Warna, Tlogomas, Kec. Lowokwaru, Kota Malang, Jawa Timur 65144, Indonesia

Keywords

Canva; Elementary School; History of Pancasila; Learning Media; Wordwall.

*Correspondence Email:

mohfaridnurulanwar@unitri.ac.id

Abstract

Pancasila education plays an important role in shaping the character and instilling a sense of nationalism in students from an early age. However, the learning process, which still uses conventional and monotonous media, has resulted in low interest and engagement among students. This study aims to develop interactive learning media based on *Canva* combined with *Wordwall* for the subject of the History of the Formulation of Pancasila for fourth-grade elementary school students. The method used is research and development (R&D) by adapting the Borg & Gall model through nine stages, namely: (1) research and information gathering, (2) planning, (3) initial product development, (4) design validation, (5) small-scale testing, (6) product revision, (7) limited testing, (8) final product revision, and (9) producing a valid and effective product. The research subjects included fourth-grade students at SDN Landungsari 2 Malang. The research instruments consisted of validation sheets from media experts, subject matter experts, and language experts, as well as response questionnaires for teachers and students. The validation results showed a very high level of feasibility, namely 95% from media experts, 87.5% from material experts, and 84% from language experts. Teacher responses reached 90%, while student responses were 76.47%. These results indicate that *Canva* and *Wordwall*-based interactive media are feasible and effective for use in Pancasila Education because they can improve students' conceptual understanding, motivation, and active involvement in the learning process.

1. Introduction

Education is a planned and directed process to create a learning environment that enables students to develop their full potential optimally. Through the educational process, individuals are expected to develop in various aspects, including spirituality, self-control, intellectual intelligence, noble character, and skills that are useful for personal, social, and national life (Lestari & Kurnia, 2022). Baehaqi (2024) states that education is a fundamental right of every individual to grow into a moral and knowledgeable member of society. In line with this, Faruq (2025) emphasizes that education not only functions as a means of transferring knowledge, but also

as an instrument for shaping critical thinking skills, decision-making, and changing living conditions for the better.

Entering the 21st century, the world of education has undergone significant transformations in line with the rapid advancement of science and technology (IPTEK). These developments require adaptation in the curriculum, learning approaches, and the integration of media and educational technology that are relevant to the needs of the times. Sulistyowati & Asriati (2023) reveal that the use of technology in the learning process is a must in order to foster critical thinking skills, effective communication skills, and increase student productivity. Furthermore, digital technology plays a role in creating a flexible, interactive, and enjoyable learning environment, thereby increasing student motivation and engagement. Yusuf (2025) states that modern classrooms are now supported by various digital devices that enable more participatory, collaborative, and student-centered learning. This transformation shows that mastery and utilization of technology are essential aspects in improving the quality of learning in the digital age.

1.1 Literature Review

The development of the digital era requires educators to have creativity and innovative skills in developing technology-based learning resources and media. The use of technology is not only intended to enrich teaching materials, but also to create a more interesting and meaningful learning experience for students. One application that has great potential in the development of visual learning media is *Canva*, which can be combined with *Wordwall* as an interactive educational game platform. *Canva* allows educators to present learning materials in a more attractive, aesthetic, and easy-to-understand manner, especially for elementary school students who have visual learning characteristics and enjoy game-based activities (Kusmirah, Maharani, & Susanti, 2025). The integration of *Canva* and *Wordwall* is expected to create a fun learning atmosphere, while also increasing students' motivation, engagement, and understanding of the concepts being studied.

Learning media plays a strategic role in the educational communication process because it serves as a link between educators and students in transferring knowledge, values, and skills. According to Zahwa (2022), media is an important tool that enables learning messages to be conveyed effectively from teachers to students. The selection and use of appropriate media will greatly affect the effectiveness of the learning process, especially in helping students understand the material more deeply and contextually. In today's digital age, students are accustomed to interacting with various technology-based devices and applications, which indirectly changes the way they receive and process information. However, in reality, many teachers still use conventional media that is static and uninteresting, making learning monotonous and less motivating for students. Faiza & Wardhani. (2024) emphasizes that teachers need to have the ability to design and utilize interactive, engaging, and relevant learning media that aligns with the characteristics of the digital generation. Therefore, innovation in learning media has become an urgent necessity to ensure that the educational process can be more effective, adaptive, and enjoyable for students.

Pancasila education is a subject that plays a central role in shaping the character, morality, and national and civic awareness of students. Through this learning process, students are expected not only to understand the basic values of Pancasila, but also to be able to internalize them in their daily attitudes and behavior. Julita et.al. (2024) explains that Pancasila Education aims to instill a comprehensive understanding of the values of Pancasila and the history of the establishment of the Unitary State of the Republic of Indonesia (NKRI) as the ideological foundation of the nation. However, in practice, this subject is often considered uninteresting by students in elementary schools. This condition is caused by the limited variety of media and learning methods used by educators, so that the delivery of material tends to be verbal and teacher-centered. As a result, students become passive and less motivated to explore the material being taught. Therefore, innovation is needed in the development of creative, interactive, and contextual learning media so that Pancasila Education can be presented in a more interesting way and be able to foster students' understanding and love for national values.

Field observations conducted during the School Field Introduction (PLP) activity at SDN Landungsari 2 Malang showed a number of problems in the Pancasila education learning process in grade IV, particularly in the

material on the History of the Formulation of Pancasila. Based on the findings in the field, the main problems lie in the low motivation of students to learn and their lack of active involvement during the learning process. In addition, the teaching methods and media used by teachers are still conventional, monotonous, and repetitive, thus failing to attract the attention of students. This situation has resulted in low enthusiasm among students in participating in learning activities and difficulty in understanding the material presented. If this situation is not addressed immediately, it could reduce the effectiveness of learning and hinder the achievement of the objectives of Pancasila Education, particularly in shaping character and instilling national values in students from an early age.

To overcome these problems, innovation is needed in learning that is oriented towards developing media in accordance with the needs and characteristics of elementary school students. One alternative solution that can be applied is the development of *Canva-based* learning media supported by *Wordwall*. This media is visually designed using *Canva* to present material in an attractive and aesthetic way, and is combined with interactive educational games from *Wordwall* to increase student participation and motivation to learn. Presenting media in *PowerPoint* format provides flexibility in its use, both in the classroom via a projector and independently at home using an *Android* device. Satman (2023) emphasizes that the advantages of digital-based media lie in its flexibility of access and its ability to combine visual, audio, and interactive elements that support the active involvement of students. In line with this, previous studies have also shown the effectiveness of using *Wordwall* in increasing student motivation and learning outcomes in various subjects, such as Social Studies (Agusti & Aslam, 2022), Mathematics (Lubis & Nuriadin, 2022), and Islamic Education (Melvi, Kustati, Amelia, & Gusmirawati, 2024). Based on this foundation, this study aims to develop *Canva-based* learning media supported by *Wordwall* as a valid and effective tool in Pancasila Education, specifically for the material on the History of the Formulation of Pancasila for fourth- grade elementary school students.

Based on preliminary studies and findings from various previous studies, *Canva and Wordwall-based* learning media have great potential for application in Pancasila Education at the elementary school level. This potential is supported by the characteristics of the media, which are able to create an engaging and meaningful learning experience through a combination of visual and audio elements and a high level of interactivity. The use of *Canva* allows teachers to design learning materials that are aesthetic, structured, and easy for students to understand, while *Wordwall* provides a variety of learning activities in the form of quizzes and educational games that can increase student engagement, motivation, and enthusiasm during the learning process. This visual and interactive approach is highly relevant to the characteristics of 21st-century students who are familiar with digital technology and tend to learn through multimodal media. In addition, *Canva and Wordwall-based* media also support the principle of differentiated learning, as they can be used flexibly both in classical learning at school and independently at home. Thus, the development of this media is expected to bring about learning innovations that are adaptive to the times while strengthening the effectiveness of Pancasila education in elementary schools.

2. Research Methods

This study uses the research and development (R&D) method. According to Sugiyono, the R&D method is a research approach that aims to produce a specific product and test its effectiveness through a series of systematic development processes (Sugiyono, 2013). Through this method, researchers can continuously evaluate, refine, and revise products until the results meet the expected needs and standards. The development model used in this study refers to the Borg and Gall model, which integrates research activities and the product development process in stages. This model consists of nine stages, namely: (1) research and information gathering, (2) planning, (3) initial product development, (4) design validation, (5) small-scale trials, (6) product revision, (7) limited field trials, (8) final product revision, and (9) producing a valid and effective final product. Each stage in this model is carried out sequentially and is interrelated, allowing researchers to continue making improvements based on the results of trials and input from experts and users, thereby obtaining learning media that is feasible and in line with the research objectives.

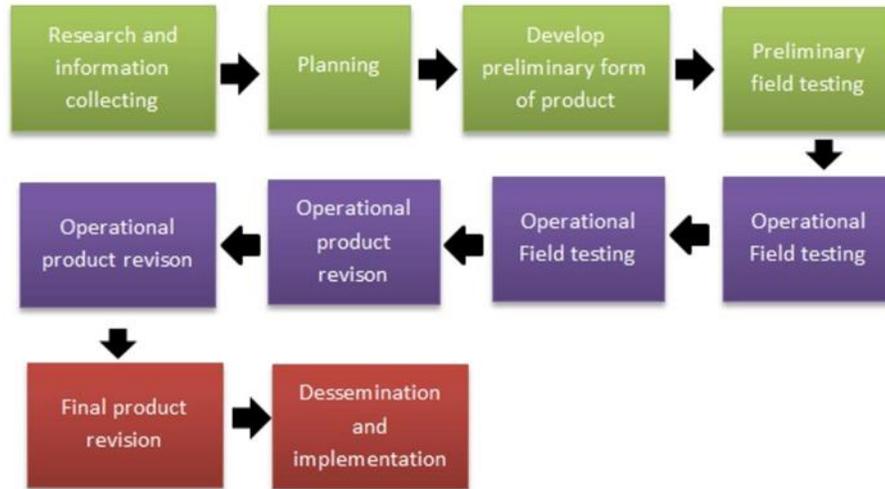


Figure 1. Borg and Gall's research stages (Fitriana, Shofyatun, & Juniarti, 2023)

The data collection instrument in this study was a validation sheet used to assess product feasibility. The validation process was carried out by two experts, namely a material expert and a media (Sholikha, Bachrib, & Dewi, 2024). The assessment on the validation sheet used a Likert scale with a score range of 1 to 4, where a score of 1 indicated the category of *not feasible*, a score of 2 indicated *less than feasible*, a score of 3 indicated *feasible*, and a score of 4 indicated *very feasible*. The Likert scale was chosen because it was considered capable of providing a clearer picture of the respondents' perceptions and views on the statements contained in the questionnaire (Indriani & Lazulva, 2020). Each expert involved in the validation process assessed the instrument based on predetermined criteria. Data analysis was conducted through a validity test aimed at assessing the validity level of the e-learning module development results. The validity assessment criteria covered several main aspects, including material presentation components, content suitability, and linguistic aspects (Hidayati, Hariyadi, & Putra, 2022). To measure the validity level of the entire research instrument, the following calculation formula was used:

$$P = \frac{f}{n} \times 100\%$$

Where P is the percentage of questionnaire data, f is the number of scores obtained, and n is the maximum number of scores (Akbar, 2015). The eligibility criteria are shown in Table 1.

Table 1. Eligibility Criteria (Source: (Fitriyah, Suciptaningsih, & Mashfufah, 2024))

No	Score	Criteria
1	75% < V ≤ 100%	Highly suitable
2	50% < V ≤ 75%	Suitable
3	25% < V ≤ 50%	Less suitable
4	0% ≤ V ≤ 25%	Not suitable

3. Result and Discussion

This study was conducted at SDN Landungsari 2, located in Dau District, Malang Regency. This school was chosen as the location for this study because SDN Landungsari 2 is one of the schools that actively implements innovations in the learning process and has human resources and facilities that support educational activities. This school has competent teaching staff, not only in terms of mastery of teaching materials, but also in paying attention to the overall development of students, including cognitive, affective, and psychomotor aspects. In

addition, SDN Landungsari 2 is also known to be active in organizing various extracurricular activities and student talent development programs, which contribute to character building and 21st-century skills. The inclusive, participatory, and dynamic learning environment, as well as the high enthusiasm for learning among the students, make this school an ideal context for implementing and testing the effectiveness of innovative digital technology-based learning media.

The learning media developed in this study is interactive media based on Canva integrated with Wordwall, specifically designed to support Pancasila Education learning on the subject of the History of the Formulation of Pancasila in the fourth grade of elementary school. The media development process was carried out systematically through several stages, namely planning, compiling learning materials, and designing interactive media displays in accordance with the characteristics of 21st-century students. This media combines informative and attractive visual elements from Canva with Wordwall-based educational games, packaged in an interactive PowerPoint format. This design allows the media to be used flexibly, both in face-to-face learning through an LCD projector and independently using an Android device. Before implementation, this learning media underwent a validation test by three experts, namely media experts, material experts, and language experts. The validation process aimed to assess the media's suitability in terms of appearance, content appropriateness, and language. The validation results were used as a basis for revisions and improvements before the media was widely used in elementary schools. With the development of this media, it is hoped that the Pancasila education learning process will become more interesting, participatory, and effective in fostering students' understanding of the fundamental values of Pancasila, especially the history of its formulation.

1. Product Validity

To assess the validity and effectiveness of the learning media, this study involved three validators, namely media experts, subject matter experts, and language experts. The three experts were selected based on their experience and track record in research related to the development of Canva-based interactive learning media. The validation process was carried out to ensure that the media met the eligibility standards in terms of appearance, content, and language.

Table 1. Expert Validation Results

Expert Validation	Percentage		Validity Category
	Stage 1	Stage 2	
Subject Matter Expert	71	87.5	Highly valid
Media Expert	95	-	Highly valid
Language Expert	84	90	Very valid

In content expert validation, there was an increase in validity from 71% (stage 1) to 87.5% (stage 2), which was then categorized as *highly valid*. This increase shows that feedback from content validators was taken into consideration and applied to media revisions. In media development research, this is common and is actually an indicator that the revision process is effective (Sugiyono, 2013). Content validation is very important because the content presented must be accurate, relevant to the curriculum, and easy for students to understand (Azhar, Wahyudi, & Yolanda, 2024). These results are in line with the research (Toma & Reinita, 2023) which developed Canva learning media in fourth grade elementary school and reported material validity of up to 90% with a category of "highly valid".

Media experts gave a score of 95% during the validation stage, indicating that the design, graphic display, interoperability, and interactivity aspects of the media fully meet the standards for usability without major revisions. This score reinforces that Canva and Wordwall-based media are not only good in terms of content, but also in terms of visuals and user experience. Similar research by Munir et al. (2024) on Canva learning media oriented towards *authentic learning* also reported a very high media aspect validity score (average score

of 3.71 on a scale of 4, category "very good"). The highly positive media expert validation provides a strong basis that the developed media has a professional, attractive design and is suitable for implementation in schools.

Linguistic validation showed a percentage of 84% in the first stage and increased to 90% in the second stage, both in the "highly valid" category. This increase indicates that the input from the language validators has been implemented well. Language that is appropriate and easy for elementary school students to understand is very important so that the information is not only accurate but also communicative and easy to internalize. Other studies also support these findings: for example, in the development of e-module media with Canva, language validity testing by validators shows that revisions based on validator feedback can improve linguistic quality to the point of being highly valid (Suryani & Suciptaningsih, 2024).

Overall, the validity of Canva and Wordwall-based learning media is considered "highly valid" according to the three experts (material, media, language). This indicates that the media is ready to be used in the actual learning process. The high validity also minimizes the risk of content errors, miscommunication, or technical disruptions when the media is implemented in the classroom. In addition, strong validity reinforces the academic justification that this media is indeed worthy of being an innovative learning tool.

2. Product Effectiveness

The next stage in this research is to conduct product effectiveness tests to assess the extent to which Wordwall-assisted Canva-based learning media can improve the quality of learning. Effectiveness measurements were carried out through trials on small groups, trials on large groups, and responses from teachers.

Table 2. Product Effectiveness Test Results

	%	Category
Small Group	89.99	Very effective
Large Group	92.31%	Very effective
Teacher Response	90	Very effective

A trial of learning media with students in small groups showed an effectiveness rate of 89.99%, while in large groups it was 92.31%. Both are in the "highly effective" category. These figures show that Canva-based media combined with Wordwall can significantly improve learning effectiveness when applied on a larger scale. These findings are in line with the research by Darwis et al (2024), which found that the use of the Canva application as a learning medium significantly improved student learning outcomes. Similarly, a literature review of Wordwall shows that its interactive features increase student motivation and engagement, which in turn has an impact on learning effectiveness (Annur, Sya'ban, Syahidah, Maulidia, & Julianti, 2025).. Theoretically, the effectiveness of learning media refers to the extent to which the media can help students achieve learning objectives by increasing motivation, understanding, and engagement during the learning process. With an effectiveness percentage approaching or exceeding 90%, the results of this study show that Canva media assisted by Wordwall works at an optimal level. This percentage indicates that the media is not only attractive and easy to use but also capable of improving the quality of student interaction with the material, thereby positively impacting learning outcomes. Furthermore, a comparison between small and large groups shows that when the application of the media was expanded from 6 participants to 13 participants, the effectiveness percentage increased. This shows that the media is not only suitable on a small scale but is also scalable and adaptable when applied more widely in the classroom.

Teachers' responses to the developed media showed an effectiveness rate of 90%, also in the "very effective" category. This statement indicates that, in terms of implementation, teachers consider the media to be feasible and effective in learning practices. Teachers, as the primary users of learning media, play an important role in the success of implementation, and positive assessments from teachers indicate that the

media is suitable for real conditions in the classroom (e.g., ease of use, student acceptance, suitability for curriculum). Previous research by Alamsyah et al. (2023) also shows that the use of Canva as a learning medium significantly increases student interest in learning, and teachers report that interactive visual media aids the learning process. This reinforces that acceptance by educators is one of the key factors in the effectiveness of media.

These highly effective test results imply that the learning media developed is not only feasible in terms of design and content (having previously undergone validity testing), but has also been proven effective in practice. This reinforces the argument that the visual-interactive media developed using Canva and Wordwall are in line with 21st-century learning needs (multimodal, interactive, technology-based) and are capable of increasing student engagement, which typically declines in traditional media-based learning.

4. Conclusions

This study was conducted to develop Canva-based learning media assisted by Wordwall that is able to meet the needs of Pancasila learning that is more interesting and interactive for elementary school students. Based on the validation results from subject matter experts, media experts, and language experts, the developed product was declared highly valid, with final scores of 87.5%, 95%, and 90%, respectively. Effectiveness tests through small group trials, large group trials, and teacher responses also showed highly effective results, with percentages of 89.99%, 92.31%, and 90%, respectively. These findings confirm that the interactive media developed is not only suitable for use but also capable of increasing student motivation, understanding, and engagement in Pancasila Education learning. Thus, Canva media assisted by Wordwall has been proven to be effective as an alternative innovative learning media that is relevant to the characteristics of 21st-century students.

Recommendations for future research include developing more interactive media by adding audio, video, or digital simulation elements, as well as testing on a wider sample to make the results more generalizable. Integrating media with various learning models is also recommended to see its effectiveness in different contexts. In addition, it is important to conduct a long-term evaluation to assess the impact of media on student learning outcomes and digital literacy. Future research is also expected to develop training for teachers to enable them to utilize Canva and Wordwall media optimally.

5. References

- Agusti, N. M., & Aslam. (2022). Efektivitas Media Pembelajaran Aplikasi Wordwall Terhadap Hasil Belajar IPA Siswa Sekolah Dasar. *Jurnal Basicedu*, 6(4), 1525–1531. Retrieved from <https://journal.uii.ac.id/ajie/article/view/971>
- Akbar, S. (2015). *Instrumen Perangkat Pembelajaran*. Rosda Karya.
- Alamsyah, A., Dewi, Yuliani, E., Ramadhan, N. K., Rosdiah, R., & Sudirman. (2023). Efektivitas Penggunaan Media Pembelajaran Berbasis Canva Terhadap Minat Belajar Siswa pada Mata Pelajaran Informatika. 1(2), 166–179.
- Annur, S., Sya'ban, M. F., Syahidah, S., Maulidia, M., & Julianti, J. (2025). Tinjauan Literatur: Penggunaan Media Pembelajaran Berbasis Website Wordwall untuk Meningkatkan Motivasi Belajar Peserta Didik. *Nusantara Journal of Education and Social Science*, 2(2), 54–62. <https://doi.org/10.69959/nujess.v2i2.108>
- Azhar, M., Wahyudi, H., & Yolanda, D. (2024). Integrasi Teknologi dalam Buku Ajar : Menyongsong. *Uluwwul Himmah Education Research Journal*, 1(1), 43–55. Retrieved from <https://www.irbijournal.com/index.php/uherj/article/view/158%0Ahttps://www.irbijournal.com/index.php/uherj/article/viewFile/158/43>
- Baehaqi, L. (2024). *Interdisciplinary Explorations in Research Menggali Potensi dan Hak Asasi dalam Kehidupan Hakikat Manusia dan Hubungannya dengan*. 2, 1603–1611.
- Darwis, D., Atmono, D., Ratumbuang, M. F. N. G., & Hasanah, M. (2024). Efektivitas Penggunaan Media Pembelajaran Aplikasi Canva Dalam Meningkatkan Hasil Belajar Siswa MA Ibitidaussalam. *Jurnal Pendidikan Ekonomi (JUPE)*, 12(1), 85–91. <https://doi.org/10.26740/jupe.v12n1.p85-91>
- Faiza, N. N., & Wardhani, S. I. (2024). Media Pembelajaran Abad 21 : Membangun Generasi Ditigal Yang Adaptif. *Jurnal Media Akademik (JMA)*, 2(12), 3031–5220.

- Fitriana, Shofyatun, & Juniarti, Y. (2023). Learning Loss dalam Pembelajaran Anak Usia Dini berbasis Blended Learning. *Jambura Early Childhood Education Journal*, 5(2), 329–342. <https://doi.org/10.37411/jece.v5i2.2248>
- Fitriyah, S. N., Suciptaningsih, O. A., & Mashfufah, A. (2024). Pengembangan Bahan Ajar IPAS Berbasis Kearifan Lokal Berbantuan Aplikasi Heyzine pada Muatan Cerita Tentang Daerahku. *JlIP - Jurnal Ilmiah Ilmu Pendidikan*, 7(6), 5230–5236. <https://doi.org/10.54371/jiip.v7i6.4447>
- Hidayati, S. A., Hariyadi, S., & Putra, P. D. A. (2022). Development of STEM-Based Educational Games As Differentiated Learning Media to Improve Students' Creative Thinking Skills. *Jurnal Paedagogy*, 9(1), 2022. Retrieved from <https://e-journal.undikma.ac.id/index.php/pedagogy/index>
- Indriani, N., & Lazulva, L. (2020). Desain dan Uji Coba LKPD Interaktif dengan Pendekatan Scaffolding pada Materi Hidrolisis Garam. *Journal of Natural Science and Integration*, 3(1), 87. <https://doi.org/10.24014/jnsi.v3i1.9161>
- Julita, E., Lumbansiantar, R., Brutu, S., Marpaung, R., Siallagan, A., Andini, P., & Rachman, F. (2024). PERAN PENDIDIKAN KEWARGANEGARAAN BERBASIS NILAI-NILAI PANCASILA DALAM MENCEGAH ISU RADIKALISME. *Вестник Росздравнадзора*, 4(1), 9–15.
- Kusmirah, Maharani, S. D., & Susanti, L. R. (2025). Analisis Kebutuhan Pengembangan Media Game Edukasi Berbantuan Canva pada Mata Pelajaran IPAS untuk Sekolah Dasar. 5(1), 275–283.
- Lestari, S. O., & Kurnia, H. (2022). Peran Pendidikan Pancasila dalam pembentukan karakter. *Jurnal Citizenship: Media Publikasi Pendidikan Pancasila Dan Kewarganegaraan*, 5(1), 25. <https://doi.org/10.12928/citizenship.v5i2.23179>
- Lubis, A. P., & Nuriadin, I. (2022). Efektivitas Aplikasi Wordwall untuk Meningkatkan Hasil Belajar Siswa dalam Pembelajaran Matematika Sekolah Dasar. *Jurnal Basicedu*, 6(4), 6884–6892. <https://doi.org/10.31004/basicedu.v6i4.3400>
- Melvi, Kustati, M., Amelia, R., & Gusmirawati. (2024). Implementasi Media Pembelajaran Wordwall Dalam Meningkatkan Motivasi Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam Di Sd Islam Al Muttaqin Sawahlunto. *At-Tarbiyah: Jurnal Penelitian Dan Pendidikan Agama Islam*, 2(1), 428–433.
- Munir, M. J. M., Zaini, M., & Haryanti, N. H. (2024). Inovasi Media Pembelajaran Canva Berorientasi Authentic Learning pada Topik Getaran dan Gelombang. *Journal of Banua Science Education*, 4(2023), 43–53. Retrieved from <https://www.irbijournal.com/index.php/uherj/article/view/158%0Ahttps://www.irbijournal.com/index.php/uherj/article/viewFile/158/43>
- Satman, S. &. (2023). Peran teknologi sebagai media pembelajaran di era abad 21. *Jurnal PenKoMi : Kajian Pendidikan & Ekonomi.*, 6(2), 194–202.
- Sholikha, A. M., Bachrib, B. S., & Dewi, U. (2024). Pengembangan Media Pembelajaran Augmented Reality Berbasis Problem Based Learning dalam Materi Virus Biologi. *JlIP - Jurnal Ilmiah Ilmu Pendidikan*, 7(3), 2663–2668. <https://doi.org/10.54371/jiip.v7i3.3549>
- Sugiyono. (2013). *Metode Penelitian; Kuantitatif, kualitatif dan*. Bandung: Alfa Beta.
- Sulistyowati, C., & Asriati, N. (2023). Pemanfaatan Teknologi Untuk Meningkatkan Efektivitas Pembelajaran Dan Keterlibatan Belajar Di Era Digital. *Jurnal Ilmiah Pendidikan Citra Bakti*, 10, 636–649.
- Suryani, S., & Suciptaningsih, O. A. (2024). Transformasi Pembelajaran Pancasila: Keunggulan Media Pembelajaran Interaktif “Sibola Lala” Bagi Siswa kelas 1 SD. *Jurnal Education*, 10(2), 568–576. Retrieved from <https://doi.org/10.31949/educatio.v10i2.8703>
- Toma, A. A., & Reinita, R. (2023). Pengembangan Media Pembelajaran Canva Berbasis Model Problem Based Learning di Kelas IV Sekolah Dasar. *Sekolah Dasar: Kajian Teori Dan Praktik Pendidikan*, 32(2), 162–177. <https://doi.org/10.17977/um009v32i22023p162-177>
- Umar Faruq, & M. Yunus Abu Bakar. (2025). Pendidikan Sebagai Alat Transformasi Sosial Perspektif Filsafat Ilmu. *Concept: Journal of Social Humanities and Education*, 4(1), 56–74. <https://doi.org/10.55606/concept.v4i1.1759>
- Yusuf, M. (2025). Flipped Classroom: Revolusi Pengajaran dalam Meningkatkan Partisipasi Siswa. *Academicus: Journal of Teaching and Learning*, 4(1), 27–44. <https://doi.org/10.59373/academicus.v4i1.80>
- Zahwa, F. A., & Syafi'i, I. (2022). Pemilihan Pengembangan Media Pembelajaran Berbasis Teknologi Informasi. *Equilibrium: Jurnal Penelitian Pendidikan Dan Ekonomi*, 19(01), 61–78. <https://doi.org/10.25134/equi.v19i01.3963>