

DIGITALIZATION OF EDUCATION: DEVELOPMENT OF PANCASILA WORD GUESSING APPLICATIONS FOR THE YOUNG GENERATION IN THE SOCIETY 5.0 ERA

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Abstract:

The Society 5.0 era encourages the integration of digital technology in various aspects of life, including education, to equip the younger generation with a deep understanding of the term nationality. This research aims to develop the Guess the Word Pancasila application, a digital game-based learning media designed to be able to introduce and strengthen state terms rooted in Pancasila, such as cooperation, government, precepts, unity and unity, sovereignty, justice, and tolerance and others. The main problem raised is the lack of attractiveness of conventional learning methods in instilling state terms in students that must be understood in today's era. The research uses research and development (R&D) methods with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model. Data collected through observations, questionnaires, and interviews with students and teachers. The results of the study show that this application can increase students' enthusiasm for learning state terms. By using game elements, such as the introduction of words through challenges and awards, students more easily understand and appreciate the concepts of statehood contained in Pancasila learning. This study concludes that the need for gamification-based education digitalization in the youth is an innovative way to be able to instill national values in the younger generation in an interactive and fun way.

Keywords: Pancasila, Digitalization of Education, State Terms.

INTRODUCTION

The Society 5.0 era demands the integration of digital technology in various aspects of life, including education. In this era, the young generation is expected not only to have good digital literacy skills but also a deep understanding of national values as a foundation in facing global challenges in the current era (Demmanggasa et al., 2023). Pancasila, as the basis of the Indonesian state, contains important values that need to be instilled in the younger generation, including the concepts of cooperation, tolerance, unity, sovereignty, and justice (Antari and Liska, 2020; Novitasari and Dewi, 2022). However, Pancasila learning in schools is often not in demand because teaching methods tend to be monotonous and do not utilize technology that is close to their daily lives, so there is a need to integrate technology and digitalization (Laia, 2023; Widyatama, Trianus and Utami, 2024).

Digitalization in the world of education offers a great opportunity to be able to overcome these challenges. The use of technology such as game-based digital applications can be one way to present Pancasila materials in a more interesting and interactive way. Gamification, or the application of game elements in learning, is a solution in increasing student engagement and encouraging them to learn actively (Taqwa et al., 2022; Laia, 2023). However, studies that specifically develop Pancasila learning media based on digital applications that incorporate the concept of gamification are still



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limited. This shows that there is a gap that needs to be bridged by this study. The need to create a learning solution that is relevant to the current technological conditions while instilling national values in the younger generation (Anggraini and Najicha, 2022; Kurniawaty and Widayatmo, 2023).

This research is focused on the development of the Guess the Word Pancasila application, a digital game-based learning media designed to introduce and strengthen students' understanding of state terms rooted in Pancasila values as the nation's view of life. The app leverages the QuickAppNinja platform, a web-based app development tool, which allows for the efficient creation of educational games (Makki et al., 2021). To design the content of appropriate state terms, this research also needs to use ChatGPT as a tool in generating the concept of words that are relevant and in accordance with Pancasila values (Arisanti et al., 2024).

The underlying problem of this study is the low attractiveness of conventional learning methods that make students less enthusiastic in learning Pancasila values. In education that still uses memorization and reading, the younger generation is now easily bored and reluctant to learn. The lack of interactive and relevant learning media to the digital life of the younger generation further exacerbates this condition (Yuanita, 2020; Saputra, Widiati and Setiyawan, 2023). Therefore, the development of this application is directed at answering the needs of the younger generation for more interesting, interactive, and relevant learning media to technological developments as an alternative means to strengthen the desire to learn.

Previous research has shown that the use of educational applications can increase students' interest in learning (Awalia, Pratiwi and Kironoratri, 2021; Rohani and Zulfah, 2021). However, most of the previous research still focused on science or language subjects that were commonly integrated with technology, while studies on the application of education based on national values are still very rarely researched (Anggraena et al., 2022). Therefore, this research has significant relevance to the trend of digitalization of education while making a new and sustainable contribution in the context of Pancasila learning in the current era. Understanding terms such as cooperation, tolerance, unity, and justice and so on is very important to form a young generation that understands the identity of their nation. Pancasila as the basis of the state and the outlook on life of the Indonesian nation plays an important role in shaping the character of the younger generation (Widyatama et al., 2024).

The formulation of the problem to be solved in this study includes the development of effective game-based applications to introduce and strengthen students' understanding of state terms. This is done considering that Pancasila education learning is considered monotonous and boring, so there is a need for efforts to increase the desire of the younger generation to learn by utilizing technology as an alternative to digitalization. This application is expected to present Pancasila learning content in a more interesting way through challenges, awards, and interactivity. The use of QuickAppNinja as an application development platform through a website with a drag and drop system and ChatGPT as a tool in determining the concept of state terms is an important part of this research innovation.

Based on this background, this research aims to develop the Guess the Word Pancasila application as a digital-based interactive learning medium that utilizes the latest technology such as ChatGPT and QuickAppNinja as a means of digitizing education. This application is not only designed to increase the understanding of the younger generation of state terms rooted in Pancasila values but also to increase their enthusiasm in learning and internalizing national values. This research is expected not only to make a practical contribution through the development of the Pancasila Word Guessing application, but also to become a theoretical basis for future research related to the digitalization of nationality-based education.



METHODS

This research uses research and development (R&D) methods to produce a game-based educational application, namely Guess the Word Pancasila. The development model applied is the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model (Pitriani, Wahyuni and Gunawan, 2021). This model was chosen because it provides systematic stages to identify needs, the process of designing, developing, implementing, and evaluating learning products. This method allows research to produce products that are in accordance with user needs and can be implemented effectively in learning. The QuickAppNinja app is used as a development platform due to its ease of designing game-based applications without requiring complex programming skills. In addition, ChatGPT is used to produce the concept of state terms that are relevant.

The research was conducted in one of the junior high schools in the city of Surabaya, one of which is SMP Negeri 16 Surabaya. This sampling is by means of convenience or opportunistic sampling which is taken according to the needs of the researcher (Widyatama and Suhari, 2023). The selection of the location was based on the availability of technological facilities in the school, as well as the willingness of teachers and students to participate in the study. The research subject consisted of 5 students in grades VIII-B as the main sample to test the developed application, by involving one PPKn teacher as a consultant to validate the content of the application. Student sampling was carried out in one class VIII-B to ensure the diversity of student characteristics.

The stage of this research begins with a needs analysis, where an interview process is carried out with teachers and students to understand the obstacles and needs in learning Pancasila. This initial data is used to design appropriate application content, including the selection of state terms to be included in the game. Next is the design stage, where the application structure is designed based on the results of the analysis. At this stage, gamification elements such as challenges, rewards, and difficulty levels are integrated to increase user engagement.

The development phase includes prototyping of the app using QuickAppNinja. The content of state terms is generated through ChatGPT with guidance on Pancasila values, such as cooperation, unity, tolerance, and sovereignty. After the prototype is completed, validation is carried out by PPKn teachers to ensure the suitability of the content with the learning objectives. The next stage is implementation, where the application is tested by students for one day. Students are required to play the app within a set amount of time, followed by an interview to gauge the experience of the user who plays it. The data collected used several tools, namely questionnaires to measure students' enthusiasm for learning using the application, interviews with teachers to evaluate the impact of the application on student understanding, and direct observation during the trial session (Ibrahim and Suardiman, 2014). Qualitative data from interviews and observations were analyzed with a thematic approach, while quantitative data from questionnaires were analyzed descriptively to identify trends in students' responses to game applications.

The last stage is evaluation, which includes an analysis of the implementation results to determine the effectiveness of the Pancasila Word Guessing application in increasing students' enthusiasm and understanding of state terms. Based on this evaluation, revisions to the prototype are made if necessary. This research is expected to produce applications that are not only relevant and interesting for students but also able to support the learning of Pancasila values in the digital era. Through this research approach, it is hoped that the Pancasila Word Guessing application can be an innovative solution in digitizing education, especially in learning Pancasila values in the Society 5.0 era. This research not only produces technology products, but also provides practical and theoretical guidance on the development of gamification-based learning media for the younger generation in the current era (Arum et al., 2023).



RESULT AND DISCUSSION

The results of this study began with the initial needs analysis stage, which focused on in-depth interviews with students in grades VIII-B at SMP Negeri 16 Surabaya. This interview aims to explore students' perceptions of Pancasila learning which has been applied in schools. From the results of the interviews, it was found that most students felt bored with conventional learning methods, such as lectures and memorization, which were considered monotonous and less relevant to their daily lives. Some of the students revealed that they often have difficulty understanding abstract terms in Pancasila material, such as sovereignty, unity, and tolerance, because there is still a lack of interactive media that can help them connect these concepts to real-life contexts. In addition, students also expressed more interest if learning is carried out through digital-based media that utilize technology, considering that they are more familiar with devices such as mobile phones.



Figure 1. Interview with Students about Pancasila Learning Now

Based on these findings, the researcher designed innovative learning media based on digital applications using systematic development steps. In the design stage, two main platforms were chosen to support this process, namely ChatGPT and QuickAppNinja. ChatGPT is used to generate words or terms that are in accordance with the values of Pancasila, such as cooperation, justice, and sovereignty, by ensuring that these terms are relevant in the context of education. QuickAppNinja was chosen as an app development platform because of its simple drag and drop features, allowing for interactive app design without the need for complicated programming skills. The app is designed with gamification elements such as level-based challenges, reward in the form of points, and a scoring system to increase student motivation in learning (Santosa, Pratama and Putra, 2020).

No	Intilah	Makna/Deskripsi Singkat
1	Ketuhanan	Keyakinan terhadap Tuhan Yang Maha Esa
2	Kemanusiaan	Pengakuan dan penghormatan atas nilai-nilai kemanusiaan
3	Persatuan	Semangat menjaga ketuhanan bangsa dan negara
4	Kerakyatan	Prinsip demokrasi dan kedaulatan rakyat
5	Keadilan	Upaya menciptakan keseimbangan hak dan kewajiban
6	Toleransi	Sikap menghargai perbedaan dalam berbagai aspek kehidupan
7	Gotong royong	Kerja sama dalam menyelesaikan masalah bersama
8	Bhinneka Tunggal Ika	Sembayan persatuan dalam keberagaman
9	Nasionalisme	Rasa cinta terhadap tanah air dan bangsa
10	Pluralisme	Pengakuan dan penghormatan terhadap keberagaman
11	Demokrasi	Sistem pemerintahan berdasarkan kedaulatan rakyat
12	Musyawarah	Pengambilan keputusan bersama melalui diskusi
13	Kebangsaan	Identitas bersama sebagai bagian dari suatu bangsa
14	Knejahteraan	Kondisi masyarakat yang sejahtera secara lahir dan batin

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Figures 2. Search for Terms with ChatGPT; Game Creation with QuickAppNinja

At the development stage, the creation of the application began by designing a glossary based on input from students' initial interviews and consultations with PPKn teachers. Researchers used ChatGPT to generate additional glossaries and ensure that each term reflects the main values in Pancasila. Once the glossary is complete, these terms are entered into the app using QuickAppNinja. This process includes creating game levels, setting challenges, and integrating attractive visual elements to increase the app's appeal to students. In this stage, the app prototype was successfully created with QuickAppNinja, with key features that include a user-friendly interface that is appropriate for the student's age, a time-based challenge system, and rewards in the form of points that students can accumulate to advance to the next stage (Hafidz and Arini, 2022).

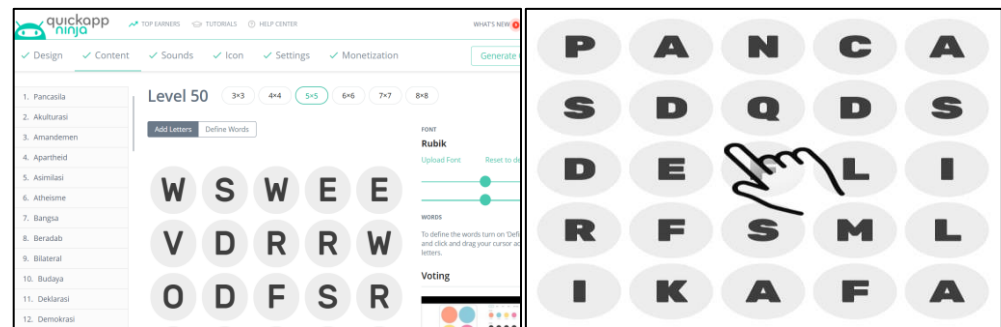


Figure 3. Preparation of Pancasila Terms in Each Game Level; Word Guessing Display

The implementation stage was carried out by involving five students in class VIII-B as trial participants. The researcher invited students to play and learn using the Guess the Word Pancasila application for one day. During this session, students were given 30 minutes to try out the game app on their devices, followed by a group discussion session to explore their experiences. Observations during the implementation showed that students were more enthusiastic in learning Pancasila terms by using the Guess the Word Pancasila application compared to traditional learning methods. They were seen actively discussing and helping each other in solving challenges in the application, which reflected the value of cooperation. One of the students even stated that learning through this digital game application feels like playing a game, but still provides a new understanding of important terms in Pancasila.



Figures 4. Students Use Digital Game Applications; Screenshots of App

The evaluation was carried out through interviews with PPKn teachers and analysis of feedback from students. Teachers gave a positive assessment of this application, stating that this application helps students better understand the concepts of Pancasila in depth in an interactive way. However, teachers also provide input to improve several aspects, such as adding variations of challenges and expanding the scope of terms taught. Based on this input, the researcher revised the digital game application, including adding additional quiz features and updating the content with new, more complex words to adjust the level of student comprehension (Putra, Andajani and Widyartono, 2023; Saputra et al., 2024).

The results of the questionnaire evaluation showed that 26 out of 30 students found this application more interesting compared to traditional learning methods, while 25 out of 30 students stated that this application helped them understand abstract terms in Pancasila. The teacher also noted an increase in students' enthusiasm for learning Pancasila after using this application, which can be seen from their increased participation in class discussions. By involving teachers as consultants in the evaluation stage, this application is improved to become more relevant and effective in supporting the learning of national values in their lives.

As part of the evaluation, the improvement of the application is carried out based on input from the students and teachers involved. One of the key improvements is the addition of a variety of challenges, such as a team game mode that allows students to work together to answer Pancasila terms, thus creating a more collaborative learning experience. In addition, an additional quiz feature with more flexible times is added to increase the user's flexibility in learning. Teachers also recommend inserting real examples in the application to reinforce the relevance of the terms to students' daily lives. With this improvement, the application becomes more dynamic and able to maintain students' interest for a longer period, while deepening their understanding of Pancasila values as the nation's view of life.

This research shows that the integration of gamification-based technology in Pancasila learning can answer the challenges of conventional learning that are less attractive to students. The Pancasila Word Guessing application not only provides an alternative learning medium that is relevant to the digital era, but also becomes an effective tool in strengthening students' understanding of Pancasila values. This research makes a practical contribution to the development of technology-based learning media, as well as providing theoretical guidance for further research in the field of national education digitalization.

Based on the results of this study, it is recommended that the process of developing digital-based learning media can continue to be improved to support the learning of Pancasila values in the Society 5.0 era. Schools can use applications such as Guess the Word Pancasila as a complement to conventional learning methods so that students are more enthusiastic and understand the concepts of nationality in an interactive way. In addition, the government through the Ministry of Education and Culture can encourage the development of similar applications with the support of more sophisticated technology and a wider scope of materials, covering all aspects of national values. For future researchers, it is recommended to explore the integration of artificial intelligence technologies further, such as data analytics to understand student learning patterns and provide adaptive challenges. Thus, the digitalization of education can run in line with the goal of strengthening the character of the young generation in Indonesia in accordance with the values of Pancasila.

CONCLUSION

This study concludes that the digitization of education through the development of gamification-based applications, such as Guessing the Word of Pancasila, can be an innovative



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solution in increasing students' interest and understanding of Pancasila values in the Society 5.0 era. This application has not only succeeded in introducing the terms of nationality in an interactive and relevant way to students' digital lives but is also capable of creating a fun and immersive learning experience, in accordance with the needs of today's young generation. The findings of this study show that integrating game elements in learning can effectively overcome students' boredom with conventional methods, while strengthening their character based on the values of cooperation, justice, tolerance, and sovereignty. This application is also proof that simple technologies, such as QuickAppNinja and ChatGPT, can be optimally utilized to create creative and meaningful learning media. In the future, further research needs to be focused on the development of adaptive features based on artificial intelligence which can adjust the level of difficulty to students' abilities, as well as expanding the scope of Pancasila materials into the broader context of social and global life, to ensure that this application continues to be relevant and have an impact on the young generation of Indonesia. Through this research, it is hoped that education is not always conventional but can develop into digital through technology integration.

REFERENCES

- Anggraena, Y., Felicia, N., Eprijum, D., Pratiwi, I., Utama, B., Alhapip, L. and Widiawati, D. (2022). Kajian akademik kurikulum untuk pemulihan pembelajaran. Pusat Kurikulum dan Pembelajaran.
- Anggraini, A. P., & Najicha, F. U. (2022). Pengembangan Wawasan Nusantara Sebagai Muatan Pendidikan Kewarganegaraan Generasi Muda Melalui Pemanfaatan Internet. *Journal Pendidikan Ilmu Pengetahuan Sosial*, 14(1), 174-180. <https://doi.org/10.37304/JPIPS.V14I1.4747>.
- Antari, L. P. S., & De Liska, L. (2020). Implementasi Nilai Nilai Pancasila Dalam Penguatan Karakter Bangsa. *Widyadari*, 21(2), 676-687. Available at: <https://ojs.mahadewa.ac.id/index.php/widyadari/article/view/916> [Accessed 30 November 2024].
- Arisanti, I., Rasmita, R., Kasim, M., Mardikawati, B., & Murthada, M. (2024). Peran Aplikasi Artificial Intelligences Ai Dalam Mengembangkan Dan Meningkatkan Kompetensi Profesional Dan Kreatifitas Pendidik Di Era Cybernetics 4.0. *Innovative: Journal Of Social Science Research*, 4(1), 5195-5205. <https://doi.org/10.31004/INNOVATIVE.V4I1.8455>.
- Arum, W. S. A., Fahri, M., Amelia, N., & Watini, S. (2023). Implementasi Perkembangan Ilmu dan Teknologi Dalam Pendidikan Karakter Pancasila. *Technomedia Journal*, 8(1 Special Issues), 18-29. <https://doi.org/10.33050/TMJ.V8I1SP.2008>.
- Awalia, L. M., Pratiwi, I. A., & Kironoratri, L. (2021). Analisis Penggunaan Aplikasi Pembelajaran Daring terhadap Minat Belajar Siswa di Desa Karangmalang. *Jurnal Basicedu*, 5(5), 3940-3949. <https://doi.org/10.31004/BASICEDU.V5I5.1354>.
- Demmanggasa, Y., Sabilaturrizqi, M., Kasnawati, K., Mardikawati, B., Ramli, A., & Arifin, N. Y. (2023). Digitalisasi pendidikan: akselerasi literasi digital pelajar melalui eksplorasi teknologi pendidikan. *Community Development Journal: Jurnal Pengabdian Masyarakat*, 4(5), 11158-11167. <https://doi.org/10.31004/CDJ.V4I5.22045>.
- Hafidz, A. S., & Arini, N. W. (2022). Pengembangan Media Noel Game Berbasis Android untuk Pembelajaran Noun di Kelas Rendah. *Jurnal Basicedu*, 6(5), 9188-9204. <https://doi.org/10.31004/BASICEDU.V6I5.3700>.
- Ibrahim, D. S., & Suardiman, S. P. (2014). Pengaruh penggunaan e-learning terhadap motivasi dan prestasi belajar matematika siswa SD Negeri Tahunan Yogyakarta. *Jurnal prima edukasia*, 2(1), 66-79. <https://doi.org/10.21831/JPE.V2I1.2645>.



Kurniawaty, J. B., & Widayatmo, S. (2023). Permasalahan Trisentra Pendidikan Dalam Penanaman Nilai-Nilai Pancasila Jelang Era Teknologi 5.0. *JAGADDHITA: Jurnal Kebhinnekaan dan Wawasan Kebangsaan*, 2(2), 33-45. <https://doi.org/10.30998/JAGADDHITA.V2I2.1881>.

Laia, J. K. (2023). Upaya Peningkatan Hasil Belajar Ppkn Melalui Penerapan Model Pembelajaran Listening Teams Di Kelas Viii Smp Negeri 1 O'o'u Tahun Pembelajaran 2022/2023. *Civic Society Research And Education: Jurnal Pendidikan Pancasila Dan Kewarganegaraan*, 4(1), 27-41. <https://doi.org/10.57094/JPKN.V4I1.820>.

Makki, M., Indraswati, D., Erfan, M., Rahmatih, A. N., & Hidayati, V. R. (2021). Workshop Dan Pendampingan Pembuatan Game Edukasi Berbasis Android Bagi Guru SDN 2 Cakranegara. *Jurnal Interaktif: Warta Pengabdian Pendidikan*, 1(2), 23-29. <https://doi.org/10.29303/INTERAKTIF.V1I2.10>.

Novitasari, S., & Dewi, D. A. (2022). Pentingnya Nilai-Nilai Pancasila Bagi Generasi Milenial. *Jurnal Pendidikan Tambusai*, 6(2), 10250-10254. <https://doi.org/10.31004/JPTAM.V6I2.4035>.

Pitriani, N. R. V., Wahyuni, I. G. A. D., & Gunawan, I. K. P. (2021). Penerapan Model Addie Dalam Pengembangan Media Pembelajaran Interaktif Menggunakan Lectora Inspire Pada Program Studi Pendidikan Agama Hindu. *Cetta: Jurnal Ilmu Pendidikan*, 4(3), 515-532. <https://doi.org/10.37329/CETTA.V4I3.1417>.

Putra, A. N., Andajani, K., & Widyartono, D. (2023). Pengembangan Model Pembelajaran Menyampaikan Kritik Sosial dalam Teks Anekdote melalui Aktivitas Apresiasi Berbasis Proyek Video Sitkom. *Jurnal Onoma: Pendidikan, Bahasa, dan Sastra*, 9(2), 848-870. <https://doi.org/10.30605/ONOMA.V9I2.2826>.

Rohani, M., & Zulfah, Z. (2021). Persepsi siswa terhadap pembelajaran e-learning melalui media google classroom untuk meningkatkan minat belajar siswa SMP Negeri 1 Kuok. *Mathema: Jurnal Pendidikan Matematika*, 3(1), 44-55. <https://doi.org/10.33365/JM.V3I1.994>.

Santosa, M. H., Pratama, I. P. S., & Putra, I. N. A. J. (2020). Developing android-based English vocabulary learning materials for primary school students. *JEELS (Journal of English Education and Linguistics Studies)*, 7(1), 161-185. <https://doi.org/10.30762/JEELS.V7I1.1467>.

Saputra, I. R., Widiati, I. S., & Setiyawan, M. (2023). Implementasi Addie dalam Pembuatan Game "Carakan" untuk Melestarikan Budaya Aksara Jawa. *JOISIE (Journal Of Information Systems And Informatics Engineering)*, 7(1), 17-24. <https://doi.org/10.35145/JOISIE.V7I1.2983>.

Saputra, T., Warlizasusi, J., & Sahib, A. (2024). Problematika Kepala Madrasah Aliyah Dalam Melakukan Supervisi Di Man 1 Rejang Lebong. *Leadership: Jurnal Mahasiswa Manajemen Pendidikan Islam*, 5(3), 87-104. <https://doi.org/10.32478/leadership.v5.2727>.

Taqwa, R., Mulyanto, M., Tahyudin, D., Hapsari, D., Toruan, L. D. L., Muslim, M., ... & Pratiwi, A. A. (2022). Joyfull learning: Pelatihan Guru Pelajaran Sosiologi di Kota Prabumulih dan Lahat. *JPPM (Jurnal Pengabdian dan Pemberdayaan Masyarakat)*, 6(2), 205-214. <https://doi.org/10.30595/JPPM.V6I2.7759>.

Widyatama, P. R. (2023). Penanaman nilai karakter cinta tanah air pada siswa di SMP PGRI 1 Buduran. *Jurnal Ekonomi, Manajemen, Bisnis, Dan Sosial (EMBISS)*, 3(2), 174-187. Available at: <https://embiss.com/index.php/embiss/article/view/213> [Accessed 29 November 2024].

Widyatama, P. R., Trianus, J., & Utami, S. (2024). Diffusion of innovation: Application of interactive learning media in PPKn subjects in junior high school. *JED (Jurnal Etika Demokrasi)*, 9(1), 46-57. <https://doi.org/10.26618/JED.V9I1.13104>.

Widyatama, P. R., Uyun, Q., Risky, E. A., Ngene, P. K., Lestari, A. W. D., Jannah, A. N., ... & Sari, M. M. K. (2024). Upaya meningkatkan Minat Belajar Pendidikan Pancasila melalui Model



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Problem Based Learning (PBL) pada Siswa Kelas VIII SMPN 16 Surabaya. *Indonesian Research Journal on Education*, 4(3), 1305-1322. <https://doi.org/10.31004/IRJE.V4I3.1023>.
Yuanita, D. I. (2020). Penerapan Strategi Pembelajaran Aktif dalam Meningkatkan Motivasi Belajar Aswaja Siswa di Madrasah. *Bidayatuna: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 3(1), 144-163. <https://doi.org/10.36835/BIDAYATUNA.V3I1.561>.



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