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Learning Pancasila Through Garuda AR Media

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Abstrak

Kurangnya media digital berdampak pada hasil belajar siswa yang rendah. Penelitian ini bertujuan mengembangkan media pembelajaran PKn berbasis realitas tertambah pada materi garuda pancasila kelas IV di sekolah dasar. Penelitian ini menggunakan metode campuran yaitu pendekatan kuantitatif dan kualitatif dengan teknik quasi eksperimen dan deskriptif. Subjek penelitian yaitu ahli media, ahli materi, dan ahli pengguna. Subjek uji coba yaitu siswa kelas IV Sekolah Dasar. Teknik pengumpulan data yang digunakan dalam penelitian ini adalah observasi, angket, dan dokumentasi. Instrumen pengumpulan data menggunakan lembar kuesioner. Teknik analisis data menggunakan analisis dekritif kualitatif dan kuantitatif. Hasil penelitian yaitu hasil validasi yang diperoleh dari ahli materi, ahli media, dan ahli pengguna (pengguna) dengan persentase berturut-turut termasuk dalam kategori sangat layak. Hasil uji coba terbatas pada peserta didik dengan memberikan angket memperoleh persentase kategori sangat baik. Dengan demikian, dapat disimpulkan bahwa media pembelajaran yang dikembangkan layak digunakan dalam pembelajaran PKn di sekolah dasar. Media pembelajaran yang dikembangkan dapat merangsang pola pikir peserta didik dalam berpikir kritis, mandiri, meningkatkan motivasi dan minat belajar peserta didik. Implikasi penelitian ini adalah hasil penelitian ini dapat memberikan kontribusi signifikan terhadap pengembangan metode pembelajaran interaktif berbasis teknologi, khususnya Augmented Reality (AR), yang dapat memperkaya proses pengajaran Pancasila di sekolah.

Kata Kunci: *Pancasila, Media Pembelajaran,* Augmented Reality

Abstract

The lack of digital media has an impact on low student learning outcomes. This study aims to develop augmented reality-based civics learning media on the Garuda Pancasila material for grade IV in elementary schools. This study uses a mixed method, namely a quantitative and qualitative approach with quasi-experimental and descriptive techniques. The study subjects were media experts, material experts, and user experts. The subjects of the trial were grade IV elementary school students. The data collection techniques used in this study were observation, questionnaires, and documentation. The data collection instrument used a questionnaire sheet. The data analysis technique used qualitative and quantitative descriptive analysis. The study results, namely the validation results obtained from material, media, and user experts (users) with consecutive percentages included in the very feasible category. The trial results were limited to students, and a questionnaire was provided that obtained a percentage of the very good category. Thus, it can be concluded that the developed learning media is feasible for elementary school civics learning. The developed learning media can stimulate students' mindsets in thinking critically and independently and increase students' motivation and interest in learning. This research implies that its results can significantly contribute to developing technology-based interactive learning methods, significantly augmented reality (AR), which can enrich the Pancasila teaching process in schools.

Keywords: *Pancasila*, Learning Media, Augmented Reality

1. INTRODUCTION

Education is an effort to educate and develop a person's potential. Education is needed to broaden horizons and prepare the nation's generation to become people with character and

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quality so they can achieve all aspects of life. Education is also very important in the era of globalization. Education helps the younger generation develop the knowledge they have acquired so that it does not become outdated. Education allows people to interact better with their environment and make the most of their lives (Alenizi et al., 2019; Khoiruzzadi & Prasetya, 2021). The process of obtaining education cannot be separated from the learning process, because learning is the essence of education. Learning is the process of acquiring knowledge, where learning is an activity that results in a change from not knowing to knowing. Learning is a teaching and learning process that occurs through the process of interaction between educators and students. One of them is through learning Citizenship Education (PKn) at every level of education, including elementary school units.

Citizenship Education (PKn) in elementary schools has a very important position in efforts to prepare students to become reliable human beings. Pancasila is the basis of the Indonesian state which is used as a guideline for national life, where the values contained in Pancasila are used as the basis and outlook for regulating the attitudes and behavior of Indonesian society. Practicing Pancasila is an obligation for all Indonesian people without exception, because Pancasila is the basic foundation of the Indonesian nation in carrying out national and state life (Magdalena, 2021; Sari, 2021) Teaching Pancasila values to children is a strategic effort to instill morals, ethics and national principles from an early age. Teaching Pancasila does not only focus on intellectual aspects, but also emotional aspects. Values such as humanity and social justice help children understand and manage their emotions, as well as develop empathy for others. Apart from that, educating children about Pancasila can prepare them to become responsible and participatory citizens in democratic life. Civics in elementary schools can implement civic participation and children's understanding of their rights and obligations as citizens.

Based on previous research findings, conducted from 2020 to 2023, there are still obstacles and challenges for students in learning Civics in elementary schools. This is proven by the Civics curriculum being too heavy so that it can become a burden for students and teachers, so it is necessary to adjust the curriculum to be more appropriate to students' abilities (Nafisah et al., 2022; Widiatmaka, 2016). The process of teaching and learning activities takes place where students appear very passive (Lastari & Saragi, 2019; Sembiring et al., 2019), students' lack of will and desire to learn, and lack of attention to teacher explanations. Teachers have not delivered Civics material contextually and relevant to students' lives, so a more contextual and problem-based approach is needed. Teaching practices that are still based on lectures and questions and answers can make students inactive and not think critically, so there is a need for a constructivist approach that is more challenging and meaningful (Lestari, 2020; Sudewi et al., 2023) After approaching several students, the researcher tried to find out further by asking directly about the students' interest in Civics lessons. From the results of initial research observations, basic level Civics learning has been implemented quite well but still seems stiff and monotonous in the management of learning media. This also happens in several elementary schools in the city of Gorontalo.

Increasingly advanced technological developments certainly have an impact on various sectors, including the world of education. This development also contributes to the development of learning media. The use of technology in the teaching and learning process not only increases the effectiveness of learning, but also makes the learning experience more interesting and interactive for students (Setyawan, B., & Fatirul, 2019; Utomo, 2023). One of the main reasons why technology-based learning media is important is its ability to provide access to wider and more varied information. With technology, students can access various educational resources such as e-books, learning videos, simulations, and educational software that are not limited by time and space. This allows students to learn at their own pace and learning style, which can improve understanding and retention of the material. Technology in

learning can increase student motivation and engagement (Kamiana et al., 2020; Melati et al., 2023). The use of interactive tools such as digital whiteboards, learning applications, and educational games can make the learning process more fun and challenging. Students tend to be more motivated to learn when they are actively involved in the process, and technology provides many ways to make learning fun and motivating for students.

As we know, in the current digital era, children prefer to play with electronic devices or smartphones, because on smartphones you can find lots of interesting things such as online games and social media. At this time, teachers should utilize technology in learning activities. Teachers must be able to create an interesting learning atmosphere by utilizing something close to their environment, in accordance with technological developments. Introducing Pancasila to elementary school children requires innovative learning media, so that children do not feel bored when learning it. A fun learning model will make students serious, relaxed and cheerful in participating in learning so that it can help improve the learning process. One of the developments in learning media that is currently still new is learning media using Augmented Reality.

Augmented Reality (AR) is a technology that combines real world elements with virtual elements in two-dimensional (2D) or three-dimensional (3D) form, which are projected onto a real environment (Alenizi et al., 2019; Yayan, 2023). This technology provides a richer and more immersive learning experience, where students can interact with virtual objects that look real. AR offers two main methods of application, namely Marker Based Tracking and Markerless Augmented Reality. Marker Based Tracking uses special markers that have certain patterns that can be recognized by the camera, so that when the camera detects this pattern it will display a three-dimensional object. On the other hand, Markerless Augmented Reality does not require special markers, but instead uses the surface of the surrounding environment as markers to display virtual objects. This technology not only makes learning more interesting and interactive, but also allows students to understand abstract concepts more easily and in depth (Atno, 2019; Tarigan et al., 2023).

Although various studies have shown the benefits of using AR in education, its application in Civics learning in elementary schools is still relatively limited. Most of the existing research focuses more on science and technology disciplines, while in-depth research on the use of AR in citizenship education is still rare. noted that students' responses to the use of AR in learning were very positive, but the research focused more on the technical aspects rather than its impact on understanding Pancasila values. Furthermore, previous research findings which stated that AR was effective in learning, did not specifically explore how this technology could be used to strengthen Pancasila values in elementary school students (Mustaqim et al., 2019; Widiatmaka, 2016). This shows that there is a gap in the literature regarding the influence of AR on Civics learning, especially in the context of instilling moral and national values in elementary school students. Therefore, it is necessary to immediately carry out more in-depth research on how AR can be integrated effectively in Civics learning in elementary schools, so as not only to increase student interest and motivation, but also to ensure that the values of Pancasila are firmly embedded in students. The novelty of this research lies in the innovative use of Augmented Reality (AR) technology as an interactive learning medium to teach Pancasila values(Salsabila et al., 2024; Sihombing et al., 2019). Until now, learning Pancasila is often done through conventional methods such as lectures or textbooks. This research introduces a more modern and interesting approach by integrating AR, which is able to present visual and interactive elements that are more real and interesting for students (Adillah, 2022; Aiman, 2018) This innovation not only offers a new way of delivering material, but can also increase student involvement in the learning process. In addition, this research focuses on developing an AR application based on Garuda, which is the symbol of the Indonesian state, so that it has a strong symbolic value in strengthening

students' understanding and appreciation for Pancasila(Firmansyah et al., 2019; Putra et al., 2024). This makes this research unique in its approach, which combines advanced technology with national ideology-based character education. This research aims to fill this gap by exploring the potential of AR as an innovative learning tool in citizenship education at the elementary school level.

2. METHOD

This research uses mixed methods, namely quantitative and qualitative approaches with quasi-experimental and descriptive techniques. The subjects or participants in this research were fourth grade elementary school students. This research develops augmented reality learning media and tests its effectiveness. In this research, we adopt and modify the Thiagarajan development model, namely the 4-D model. In more detail, the research design is divided into several stages. The first, defining, is the stage for determining and defining the needs needed in development. At this stage, the researcher determines What products will be developed based on the results of the needs analysis carried out through previous observation activities(Puspita Dewi et al., 2023; Rastaty, 2022). The definition stage begins with an analysis of the various aspects needed in media development, including identifying the basic problems needed in media development, analyzing student character with the aim of finding out how big it is. knowledge and use of technology, especially cellphones in learning, analyzing the curriculum which was carried out to identify Core Competencies (KI) and Basic Competencies (KD) in the 2013 Curriculum, then translating them into indicators and determining their sequence and analyzing appropriate material to be developed using Augmented Reality media. The material analyzed is prioritized for those that experience difficulties in applying and providing explanations in learning.

Second, design, namely the activity carried out at this stage is designing product designs that have been planned in accordance with the material and learning objectives, namely designing augmented reality-based media with Garuda Pancasila. Third, development, namely at this stage the learning media that has been designed is then developed into a product and then a product validity test is carried out to produce a product in accordance with the specifications determined through product validity testing by media experts, material experts and user experts as well as limited trials to find out the process of using media that has been developed. This research will be conducted in several public and private elementary schools in Gorontalo. For the needs of research development and limited trials, the researchers determined one public school and one private school as samples. The schools that will be used as research samples are SDN 5 Limboto and UNG Laboratory Elementary School. The subjects in this research were media expert validators, material expert validators, and user expert validators. The data collection techniques used in this study were observation, questionnaires, and documentation. The data collection instrument used a questionnaire sheet. The data analysis technique used qualitative and quantitative descriptive analysis.

3. RESULTS AND DISCUSSION

Results

The product resulting from this research is an android application in the form of augmented reality (AR) with a marker based tracking method which has an apk file format assisted by a card as a scan marker with the content of Garuda Pancasila Civics learning material for fourth grade elementary school students. Augmented Reality is a field of computer research that deals with the combination of the real world with computer-generated

data. This research was conducted at SDN 5 Limboto and UNG Laboratory Elementary School. The results of the research were used as a basis for researchers in developing Android-based AR learning media for Civics subjects with Pancasila Garuda material in elementary schools, with the aim of helping teachers deliver the material and attracting students' interest in Civics learning. In this research, researchers used a 4D development model which consists of defining, designing, developing and disseminating. However, due to time constraints, this research was only carried out at the Development stage, namely feasibility testing and limited product trials.

The initial step in this research and development was to analyze problems regarding learning media by conducting observations and interviews at SDN 5 Limboto and SD Laboratory UNG. Research and development of augmented reality learning media is motivated by learning problems in elementary schools, namely the lack of optimal delivery of material in Civics learning and students' lack of interest in participating in learning. This problem occurs because the use of media is not optimal in the learning process. The function of using media in the learning process is not only to make it easier for teachers to convey material clearly, but also to attract students so that the learning atmosphere in the classroom is more controlled.

Second, after carrying out the definition stage, the design stage is then carried out. This design activity begins with designing an outline of the media content which includes design templates and materials according to the results of the previous needs analysis. Researchers use hardware in the form of laptops and software to design media. At this stage the researcher carried out a design which included marker design and user interface (UI/UX) using the Adobe Photoshop CC 2020 application. Photoshop is a popular graphic design software used to edit and manipulate images. With advanced features that include layer and blending modes, Photoshop allows users to create interesting and creative visual works with a high degree of precision. Apart from that, the researcher also modeled the 3D object "Garuda Pancasila" using the Blender application, and edited the learning video to be displayed using Adobe Premiere CC 2020, which is professional software for video editing. The maker design using the Photoshop CC 2020 application is presented in Figure 1. and the UI/UX design of the Garuda AR application using the Photoshop CC 2020 application is presented in Figure 2.

Furthermore, the learning media that has been designed and designed is then developed into a product. At this stage the researcher creates a database with the initial stage of carrying out the official registration process on the Vuforia Engine Developer website to obtain the required license key. Next, create a database and add special markers that will be used in developing Augmented Reality applications. Once the marker is added it will produce a file in .unitypackage format to be imported into the Unity application as a database. After that, the application design is carried out by combining all the assets that have been created previously, by developing the application, making a database connection to the application, and setting up markers and AR cameras. After that, settings are made in the Bulding menu so that it can be used on mobile devices.

The third step is the development stage. At this stage the researcher develops augmented reality learning media according to the initial design that has been designed. At this development stage, the media that has been designed will then be tested for its suitability by validating it with experts and class IV homeroom teachers as users. Here the researcher uses 1 material expert, 1 media expert and 2 users. The following are the validation results of augmented reality learning media from validators in their respective fields. A recap of the validation of Android-based augmented reality learning media is presented in Table 1.

Figure 1. Marker Design Using the Photoshop CC 2020 Application

Figure 2. UI/UX Design of the Garuda AR Application Using the Photoshop CC 2020 Application

Table 1. Recapitulates the Validation Results of Augmented Reality Learning Media

No.	Validation type	Eligibility percentage (%)	Information
1	Media expert	95.7	Very Possible
2	Material expert	94	Very Possible
3	User expert	93.8	Very Possible
Total Score Obtained		**283.5**	
Average Score		**94.5**	Very Possible

After validating it and declaring it suitable for use, the researchers conducted a limited trial on class IV students. Limited trials were carried out at SDN 5 Limboto and UNG Laboratory Elementary School, with a total of 20 samples from class IV at SDN 5 Limboto and 20 people from class IV at UNG Laboratory Elementary School, taken randomly, so the total sample was 40. In the trial process, the teacher was not involved in the media use process because he was writing exam questions and taking care of administration, so he asked

the researcher to be directly involved in the media use process, but the teacher remained. in the classroom to observe the use of augmented reality learning media in the learning process. A trial was carried out to determine students' responses to the media developed through a questionnaire on all aspects. The questionnaire consisted of 5 rating scales, namely 1 (Strongly Disagree), 2 (Disagree), 3 (Fairly Agree) and 5 (Strongly Agree). Agree). Based on the results of observations, students seemed very enthusiastic in learning using augmented reality learning media. According to the Civics teacher at SDN 5 Limboto and SD Laboratory UNG, augmented reality learning media is suitable for use in the learning process because it is very practical to use and can build students' interest in Civics learning, especially in Garuda Pancasila material. Students looked very enthusiastic and interested in the media being developed. they are very happy to take part in learning using augmented reality media. This can also be seen from the results of the student response questionnaire where the results obtained were very good with an average of 4.55 and a percentage of 91%.

The validation results carried out by media experts, material experts and users show that the AR learning media developed is very suitable for use with an average feasibility percentage of 94.5%. This shows that this media is not only successful from a technical perspective, but is also relevant and effective in the context of Civics learning in elementary schools. The results of the student response questionnaire also support these findings with an average score of 4.55 and a percentage of 91%, indicating that students feel very enthusiastic and interested in using AR media.

Discussion

These results show that the use of AR technology in education can have a significant positive impact on student interest and participation in the learning process. This application, which combines elements of education and entertainment, provides a more interactive and interesting learning experience, which indirectly increases student motivation and engagement(Masitah et al., 2023; Sri Ulfa Idayanti et al., 2024). Thus, AR has the potential to be a solution to overcome students' lack of interest in conventional learning which is generally monotonous. The findings of this research are in line with the results obtained in previous research which shows that AR can increase positive responses from both students and teachers in the learning process (Khoiruzzadi & Prasetya, 2021; Sudewi et al., 2023). These results are also in line with research which states that the use of AR is very effective in increasing students' understanding of the material taught (Kamiana et al., 2020)(Lastari & Saragi, 2019). This research strengthens the argument that AR can improve the quality of learning by creating a more dynamic and interesting learning environment, especially in subjects that require understanding of abstract concepts such as (Lestari, 2020; Magdalena, 2021). Similar research has been carried out with satisfactory results, such as research that found student responses in learning using AR were very good, and teachers in teaching were also in the very good category(Mahendra, 2018; Melati et al., 2023). Previous research also revealed that the use of AR in learning was very effective for fifth grade students (Nafisah et al., 2022; Omar et al., 2020).

From a pedagogical perspective, the integration of technology such as AR in learning creates opportunities to apply constructivist learning theories where students can build their own understanding through direct interaction with digital content(Sembiring et al., 2019; Tarigan et al., 2023). This is especially relevant in the context of Civics learning, where understanding concepts such as Garuda Pancasila is often abstract and requires visualization to improve student understanding(Utomo, 2023; Widiatmaka, 2016). AR, as a technology that enables three-dimensional visualization and real-time interaction, is particularly effective in bridging this gap, allowing students to visualize and manipulate virtual objects in a real-world context. Previous research shows that AR can increase student engagement and

understanding by providing richer and more meaningful learning experiences (Samsiyanawati et al., 2019; Sari, 2021). In addition, previous research shows that AR can increase students' learning motivation by providing a more interactive and interesting learning environment(Purnomo & Nurhidayat, 2023; Setyawan, B., & Fatirul, 2019). Thus, the results of this research are supported by extensive literature showing that AR is an effective tool for improving the quality of learning in various educational contexts. By paying attention to the research results and comparison with previous studies, it can be concluded that the development of Android-based AR learning media, apart from being technically successful, also has great potential in improving the quality of Civics learning in elementary schools. Further implementation and testing on a larger scale will provide further insight into the long-term impact of using AR in education.

The implications of this research include several important aspects in education and technology. First, the results of this research can make a significant contribution to the development of technology-based interactive learning methods, especially Augmented Reality (AR), which can enrich the Pancasila teaching process in schools. By proving effective, the use of AR can be applied more widely in various educational institutions, thereby increasing students' interest in learning Pancasila values. Second, this research can be a basis for policy makers in education to include AR technology as part of the curriculum, in order to improve the quality of character education in Indonesia. Finally, the implication for educational technology developers is that there is an opportunity to create more AR-based learning applications that support the teaching of other materials, thereby accelerating digital transformation in the education sector.

The limitation of this research lies in the scope of application of AR technology which may only cover a small number of samples or certain schools, so the results cannot necessarily be generalized to a wider population. In addition, technical limitations such as the availability of devices that support AR, adequate internet access, and teachers' ability to operate this technology can be obstacles to widespread implementation. This research may also be limited to short-term aspects, so it has not evaluated the long-term impact of using AR in learning Pancasila, such as changes in students' attitudes or behavior in everyday life. As a recommendation, further research should include trials on larger and more diverse populations, so that the results are more representative. Apart from that, training for teachers and students regarding the use of AR technology needs to be carried out systematically so that its implementation can be effective. Another recommendation is that the government or schools can invest in technological infrastructure that supports AR-based learning, as well as include this method in the curriculum officially to ensure its sustainability. Long-term research is also needed to see the ongoing impact of using AR on the understanding and appreciation of Pancasila values.

4. CONCLUSION

This research succeeded in developing Augmented Reality (AR) based learning media specifically designed for Citizenship Education (PKn) subjects with a focus on Garuda Pancasila material. This media is an Android application that uses a marker-based tracking method in the APK file format, supported by cards as scan markers to display AR objects that are relevant to the learning material. The research results show that AR-based learning media is very suitable for use in elementary schools, based on validation results from media experts, material experts and users. The students showed high enthusiasm during the learning process using AR media, and teachers who observed the learning process also stated that this media was practical and could increase students' interest and motivation in learning Civics. Augmented Reality has proven to be an effective medium in learning, especially in attracting

student interest and making learning material more interesting and interactive. In the context of the development of educational technology, the results of this research provide a significant contribution by offering AR technology-based learning innovations that not only increase student interest but also support more interactive and interesting learning.

5. REFERENCE

Adillah, F. C. (2022). Implementation of Living Values Education Pancasila Values In the Generation of Indonesians. QISTINA: Jurnal Multidisiplin Indonesia, 1(1), 1–6. https://doi.org/10.57235/qistina.v1i1.15.

Aiman, U. (2018). Peningkatan Pemahaman Nilai-Nilai Pancasila dan Prestasi Belajar PKn dengan Metode Pembelajaran Cooperative Learning Model Picture and Picture di MIN 2 Sleman. Jurnal Pendidikan Madrasah, 3(1), 159–168. https://doi.org/10.14421/jpm.2018.31-13.

Alenizi, B. K., M., & Sabry Shaaban, T. (2019). Sikap Guru Pendidikan Khusus Terhadap Penggunaan Teknologi Augmented Reality Dalam Mengajar Siswa Penyandang Disabilitas Belajar Di Riyadh. majalah Kampus Pendidikan. Banha, 34(134), 1–30. https://doi.org/10.21608/Jfeb.2023.304288.

Atno. (2019). Kelayakan Media Pembelajaran Cd Interaktif Dan Media Vcd Terhadap Hasil Belajar Sejarah Siswa Sma Negeri Di Banjarnegara Ditinjau Dari Motivasi Belajar. Jurnal Paramita, 215(34), 34. https://doi.org/10.15294/paramita.v21i2.1041.

Firmansyah, Arief, M., & Wonorahardjo, S. (2019). Penerapan Model Pembelajaran. Pai, 5(2), 87–92.

Kamiana, K. A., Kesiman, M. W., & Pradnyana, G. A. (2020). Pengembangan Augmented Reality Book Sebagai Media Pembelajaran Virus Berbasis Android. Karmapati, 167(24), 4. https://doi.org/10.23887/karmapati.v8i2.18351.

Khoiruzzadi, M., & Prasetya, T. (2021). Perkembangan Kognitif Dan Implikasinya Dalam Dunia Pendidikan (Ditinjau Dari Pemikiran Jean Piaget Dan Vygotsky. Jurnal Madaniyah, 11(2), 19.

Lastari, R., & Saragi, D. (2019). Analisis Permasalahan Pembelajaran Pendidikan Kewarganegaraan (Pkn) Pada Siswa Madrasah Ibtidaiyah Negeri 8 Langkat. Jmp-Dmt, 4(ue 2)), 23. https://doi.org/10.30596/jmp-dmt.v4i2.14708.

Lestari, E. Y. (2020). Refleksi 75 Tahun Indonesia Merdeka: Dinamika Pendidikan Kewarganegaraan. Jurnal Pendidikan Kewarganegaraan Undiksha, 8(3), 24. https://doi.org/10.23887/jpku.v8i3.28675.

Magdalena, S. D. F. (2021). Pembelajaran Pendidikan Kewarganegaraan Di Sekolah Dasar Negri Bojong 3 Pinang. Journal Bintang, 22(22), 27.

Mahendra, I. B. (2018). Implementasi Augmented Reality (Ar) Menggunakan Unity 3d Dan Vuporia Sdk. Jurnal Ilmu Komputer, 22(1), 1–5.

Masitah, W., Sitepu, J. M., & Raniyah, Q. (2023). Cultivating the Pancasila Student Profile in Early Childhood Using the Garuda Book: An Innovative Method in Indonesian Educational Practices. Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini, 8(4), 225–237. https://doi.org/10.14421/jga.2023.84-03.

Melati, E., Fayola, A. D., Hita, I. P. A. D., Saputra, A. M. A., Zamzami, Z., & Ninasari, A. (2023). Pemanfaatan Animasi Sebagai Media Pembelajaran Berbasis Teknologi Untuk Meningkatkan Motivasi Belajar. Journal On Education, 6(1), 732–741. https://doi.org/10.31004/Joe.V6i1.2988.

Mustaqim, I., Pd, S. T., & Kurniawan, N. (2019). Pengembangan Media Pembelajaran Berbasis Augmented Reality. Edukasi Elektro, 1(1), 36–48. https://doi.org/10.21831/jee.v1i1.13267.

Nafisah, A. D., Sobah, A., Yusuf, N. A. K., & Hartono, H. (2022). Pentingnya Penanaman Nilai Pancasila Dan Moral Pada Anak Usia Dini. Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini, 6(5), 5041–5051. https://doi.org/10.31004/Obsesi.V6i5.1865.

Omar, M., Ali, D. F., & Kamaruzaman, F. M. (2020). Kerangka Konseptual Pengembangan Kerangka Pembelajaran Menggambar Teknik Augmented Reality Berbasis Lingkungan Augmented Reality. Jurnal Internasional Penelitian Akademik Dalam Ilmu Bisnis dan Sosial, 13(12), 34. https://doi.org/10.6007/Ijarbss/V13-I12/20242.

Purnomo, F. A., & Nurhidayat, W. (2023). Augmented Reality Sebagai Media Informasi Museum Purbakala Sangiran. Jurnal Itsmart, 89(34), 36. https://doi.org/10.20961/itsmart.v1i2.600.

Puspita Dewi, D., Aeni, A. N., & Nugraha, R. G. (2023). Development of Website-Based Learning Media on the Practice of Pancasila on Student Learning Motivation. Jurnal Cakrawala Pendas, 9(2), 250–261. https://doi.org/10.31949/jcp.v9i2.4735.

Putra, L. D., Hedrina, L., Idam, D. A., & Arifa, D. N. (2024). Use of Digital Media and Technology in the Learning Process By Teacher Sdit Baitussalam. Progres Pendidikan, 5(2), 188–192. https://doi.org/10.29303/prospek.v5i2.608.

Rastaty, R. (2022). Internalizing Pancasila Through Pop Culture and Youth Community. Jurnal Masyarakat dan Budaya, 24(2), 219–230. https://doi.org/10.55981/jmb.1601.

Salsabila, A. P., Sunaryati, T., & Bangsa, U. P. (2024). Development of Picture Storybooks to Improve Students' Independent Character in Pancasila Education Learning. Journal of Science and Research, 5(1), 7–23.

Samsiyanawati, U., Ikebayu, D. R., R, S. A., & Wijayanti, M. D. (2019). Pengaruh Media Pembelajaran Berbasis Augmented Reality (Ar) Terhadap Minat Belajar Siswa Sekolah Dasar Pada Materi Sistem Pencernaan Manusia (Vol 6, Number 3, bl 24). https://doi.org/10.20961/Shes.V6i3.82352.

Sari, N. Y. (2021). Pancasila Sebagai Dasar Dan Ideologi Bangsa (Pentingnya Rumusan Butir-Butir Pancasila Sebagai Dasar Pendidikan Moral Dan Pemersatu Keberagaman Bangsa Indonesia. Tarbawi Ngabar: Jurnal Of Education, 2(1), 01–21. https://doi.org/10.55380/Tarbawi.V2i1.93.

Sembiring, T., Prasiska, G., Ramadhani, K. N., Ningsih, P. W., Siahaan, R. Y., Andini, S., Siagian, L., & Rachman, F. (2019). Tantangan Guru Dalam Menerapkan Model Pembelajaran Ppkn Pada Kurikulum Merdeka. Soko Guru: Jurnal Ilmu Pendidikan, 3(3), 01–06. https://doi.org/10.55606/Sokoguru.V3i3.2916.

Setyawan, B., & Fatirul, A. N. (2019). Augmented reality dalam pembelajaran IPA bagi siswa SD. Kwangsan: Jurnal Teknologi Pendidikan, 7(1), 286912. https://doi.org/10.31800/jtp.kw.v7n1.p78--90.

Sihombing, C., Cui, Z., Karo, R. K., & Nanda, F. A. (2019). Whatsapp-Based E-Learning Implementation on Values Learning Pancasila in Class V Sd Negeri 122351 Introduction. 5(3), 317–332.

Sri Ulfa Idayanti, Iswandi, I., & Hassan Faqih. (2024). Implementation of Character Education Values Through Drawing Learning in Arts and Culture Subjects at Sekolah Menengah Pertama (SMP) Negeri 3 Padang Panjang. Education Specialist, 2(1), 15–20. https://doi.org/10.59535/es.v2i1.149.

Sudewi, I. G. A., Suharsono, N., & Kirna, I. M. (2023). Penerapan Model Pembelajaran Berbasis Proyek Untuk Meningkatkan Kemampuan Berpikir Kritis Pada Siswa Kelas X Multimedia 3 Smk Negeri 1 Sukasada. Jurnal Teknologi Pembelajaran, 3(2). https://doi.org/10.23887/jtpi.v3i1.1038.

Tarigan, W. P. L., Kuswanto, H., & Tarigan, C. U. (2023). Booklet Augmented Reality Terintegrasi Potensi Lokal Untuk Memudahkan Rasa Ingin Tahu dan Minat Belajar Siswa. Jurnal Pendidikan Anatolia, 8(2), 195–206.

https://doi.org/10.29333/Aje.2023.8213a.

Utomo, F. T. S. (2023). Inovasi Media Pembelajaran Interaktif Untuk Meningkatkan Efektivitas Pembelajaran Era Digital Di Sekolah Dasar. Pendas : Jurnal Ilmiah Pendidikan Dasar, 8(2), 3635–3645. https://doi.org/10.23969/Jp.V8i2.10066.

Widiatmaka, P. (2016). Kendala Pendidikan Kewarganegaraan dalam membangun karakter peserta didik di dalam proses pembelajaran. Jurnal Civics: Media Kajian Kewarganegaraan, 13(2), 188–198. https://doi.org/10.21831/civics.v13i2.12743.

Yayan, A. (2023). Pentingnya Pendidikan Bagi Manusia. Jurnal Buana Pengabdian, 1(No.1), 10–19. https://doi.org/10.36805/jurnalbuanapengabdian.v1i1.581.