CULTURAL LITERACY AND CITIZENSHIP *MOBILE AUGMENTED REALITY* IN ELEMENTARY SCHOOL STUDENTS

Siti Uswatun Khasanah, Bambang Sumardjoko
Program Studi Magister Pendidikan Dasar, Sekolah Pascasarjana
Universitas Muhammadiyah Surakarta

Abstrak

Penelitian ini dilatarbelakangi kurangnya pengetahuan siswa terhadap keberagaman budaya daerah serta makna nasionalisme siswa yang rendah. Kegiatan literasi budaya dan kewargaan hanya terpaku pada membaca buku teks tidak diintegrasikan dengan penggunaan teknologi. *Mobile Augmented Reality* membantu siswa memperoleh informasi lebih mudah, menarik, dan interaktif dengan visualisasi dan simulasi objek tiga dimensi pada kegiatan literasi budaya dan kewargaan. Tujuan penelitian ini untuk mendeskripsikan penerapan literasi budaya dan kewargaan menggunakan media *Mobile Augmented Reality*. Penelitian ini menggunakan metode kualitatif dengan pendekatan fenomologis. Metode pengumpulan data melalui wawancara, observasi dan dokumentasi. Informan wawancara pada penelitian ini adalah kepala sekolah, guru kelas V dan siswa kelas V. Lokasi penelitian ini di SDN 01 Jumapolo. Analisis data dengan reduksi data, penyajian data serta penarikan kesimpulan. Hasil penelitian ini menunjukkan bahwa media *Mobile Augmented Reality* dapat mengembangkan kegiatan literasi budaya dan kewargaan di jenjang sekolah dasar secara optimal, hal ini terlihat pada saat guru melakukan Kegiatan literasi budaya dan kewargaan yang dilakukan di dalam kelas dengan mengoperasikan *Assemblrr edu* yang merupakan *Mobile Augmented Reality* untuk mengamati objek dalam bentuk 3 dimensi. Kegiatan pada aspek budaya guru mengenalkan kepada siswa alat musik tradisional, rumah adat indonesia, peninggalan sejarah serta mengenal cerita daerah. Kemudian pada aspek kewargaan guru meminta siswa untuk mengamati lambang pancasila serta nilai-nilai yang terkandung yang memuat nilai ketuhanan, kemanusiaan, persatuan, kerakyatan dan keadilan.

Kata Kunci : literasi budaya dan kewargaan, *mobile augmented reality*, sekolah dasar

Abstract

This research is motivated by the lack of students' knowledge of regional cultural diversity and the low meaning of student nationalism. Cultural and civic literacy activities are only focused on reading textbooks and are not integrated with the use of technology.Mobile Augmented Reality help students obtain information more easily, interestingly, and interactively by visualizing and simulating three-dimensional objects in cultural literacy and civics activities. Objective study This is to describe the application of cultural literacy and citizenship using media Mobile Augmented Reality. This study uses a qualitative method with a phenomenological approach.Method collection data through interview, observation and documentation. Interview informants in this study were school principals, class V teachers and fifth grade students. The location of this research was SDN 01 Jumapolo. Analysis data with data reduction, data presentation and drawing conclusions.Results study This show that media Mobile Augmented Reality can optimally develop cultural literacy and citizenship activities at the elementary school level, this can be seen when the teacher does it Cultural literacy and citizenship activities carried out in the classroom

by operating the edu Assemblrr which is an augmented reality for observing objects in 3 dimensions. Activities on the cultural aspect of the teacher introduce students to traditional musical instruments, Indonesian traditional houses, historical heritage and get to know local stories. Then in the aspect of citizenship the teacher asks students to observe the Pancasila symbol and the values contained therein which contain the values of divinity, humanity, unity, democracy and justice.

Keywords : cultural literacy and citizenship, mobile augmented reality, elementary school students.

1. INTRODUCTION

Cultural and civic literacy is one of the life skills needed in the 21st century. Cultural literacy is the ability to understand and behave towards Indonesian culture as a national identity. Meanwhile, civic literacy is the ability to understand rights and obligations as citizens (Ministry of Education and Culture, 2017). Thus, cultural and civic literacy is the ability of individuals and communities to behave towards their social environment as part of a culture and nation.

Cultural and civic literacy not only saves and develops national culture, but also builds the identity of the Indonesian nation in a global society. Upholding the noble values and social life of the Indonesian people needs to be instilled as an identity and a stronghold so that the nation's culture is preserved (Ardiansyah & Nana, 2020). Therefore, cultural literacy and citizenship are very important for every student, as a prerequisite for fostering a sense of responsibility, tolerance towards others, and love for the homeland. The diversity of nations, languages, customs, and traditions begins to be disturbed by people or groups who do not want differences and want to open up the cultural wealth of this nation (Putri Utami & Muzakki, 2020).

The school literacy movement, especially cultural literacy and citizenship is needed in the world of education to strengthen cultural literacy and citizenship among students (Cahyani et al., 2020). Cultural literacy and citizenship curricula in the 21st century are able to open a window to the world of literacy through the grip of mobile devices, for example utilizing the internet of things (IOT), mobile technology and informal learning tools to encourage connections between learning experiences and enable the acquisition of knowledge anytime and anywhere. . Advances in technology and ubiquitous mobile access have increased the popularity of AR in recent years. Mobile is a term used to describe applications on small, portable and wireless devices and supports communication (Purwodani et al., 2018)

Augmented Reality learning media on mobile is a variation of learning media that is integrated with technology. Learning media with Augmented Reality have benefits in improving the learning process and students' interest in learning because AR can project real and involve the interaction of all the five senses of students (Khairunnisa & Aziz, 2021)

Augmented Reality (AR) that connects real-world content with digital learning resources at the right place and time can increase student success through inquiry-based learning activities. Augmented Reality-based learning applications have been widely used as a bridge for interactive digital learning and concepts in several curricula, the media used in learning can be help students, such as the use of augmented reality media. Augmented Reality allows learning activities to apply information technology to be more interesting, especially in learning (Aditama et al., 2021).

Research conducted by Khaurinisa & Azis said that the Augmented Reality technology learning system has the potential to increase interest, motivation and results from the learning process, Augmented Reality technology has not been widely used by teachers as learning media, therefore efforts are needed to build a learning system with using technology, one of the technologies that can be used is AR, by using AR it is hoped that students will be able to increase cultural literacy and citizenship in learning Pancasila and Citizenship (Khairunnisa & Aziz, 2021).

The same research was also carried out by, that combining direct learning and real learning can produce a better learning experience felt by students. In contrast to conventional learning, some activities in class can be collaborated using Augmented Reality (AR) technology, the learning process using technology like this will affect students' mastery of concepts (Wulandari et al., 2020)

From the explanation above, researchers will conduct research related to *Mobile Augmented Reality* to develop cultural and civic literacy skills at the elementary school level. Instructional Media *Mobile Augmented Reality* used so that the results of learning activities by recognizing cultural literacy and citizenship can run well.

2. METHOD

This study uses a type of qualitative research. There are 5 approaches in qualitative research, namely: narrative, phenomenology, grounded theory, ethnography, and case study (Moleong, 2017). This study uses a phenomenological approach. Study Phenomenological Qualitative Phenomenological Qualitative Research is a research

method that aims to understand and describe a person's life experiences related to a phenomenon that is the focus of research. Phenomenological research is research conducted to understand the essence of the observed phenomena, as well as to understand individual experiences and perceptions of these phenomena. In phenomenological research, researchers seek to understand the subjective world of individuals through interactions between subjects and their world.

This study uses a subjective approach, in which researchers seek to understand the subjective world of participants and provide interpretations of the life experiences they experience (Moleong, 2017).The selection of qualitative research is due to the fact that there are several factors that are preferred in terms of the elaboration and explanation of a phenomenon to be studied. This research lasted for four months from December 2022 to March 2023 . The research was carried out directly at SDN 01 Jumapolo with 29 students.The data in this study were collected based on data and data sources. This research is directly related to cultural literacy and citizenship using augmented reality media in elementary schools.

The research procedures are adapted to the needs of the supporting process of obtaining valid data and facilitating research. The data collection techniques used in this study were observation, interview and documentation techniques (Moleong, 2017). The following details the data collection techniques: Observation Techniques, Interview and Documentation. The observation technique was carried out by observing a complete picture of the cultural literacy and citizenship activities using augmented reality media that were carried out and systematically writing down the observations in the form of field notes. The interview technique used was unstructured interviews which were carried out using general interview instructions (interview guidelines) which only contained an outline that would be asked regarding cultural literacy and citizenship using augmented reality media to 3 informants, namely students, teachers and school principals.

Retrieval of data through documents in the form of reports, meeting minutes, student notes and other documents regarding cultural literacy and citizenship using augmented reality media at the school (Moleong, 2017). After collecting the data collected from the research conducted, the data was then analyzed using the Miles and Huberman analysis model. Analytical activities are either completely continuous or further subdued by interactive representations in four steps. plus. Description of the four steps mentioned,

including data collection, data reduction, data display, and conclusion/data validation related to cultural literacy and citizenship using augmented reality media in the school.

3. RESULT AND DISCUSSION

The research began with observation activities in class V SDN 01 Jumapolo. After that, it was observed that the level of cultural literacy and citizenship. In the initial observation activities at SDN 01 Jumapolo during literacy activities on cultural and civic materials. Literacy activities begin with the teacher introducing technology*mobile augmented reality*, then teaches students to search, install and use applications related to augmented reality. The teacher uses the Assemblrr Edu application which contains cultural and citizenship content.

Application (AR) is a platform that allows students to use 3D and Augmented Reality (AR) to make learning activities more interactive, collaborative and interesting. This application can turn boring learning exercises into fun with features that are easy to use and accessible (Sural, 2018).

In the next observation activity at SDN 01 Jumapolo during literacy activities on culture and citizenship materials in class, the teacher introduced augmented reality technology on mobile. Teachers use a modern learning approach that is integrated with information and communication technology, students become the center of learning. This is done because student-centered learning can improve student understanding. The teacher directs students to open the playstore then look for the Assemblr / Assemblr Edu application.
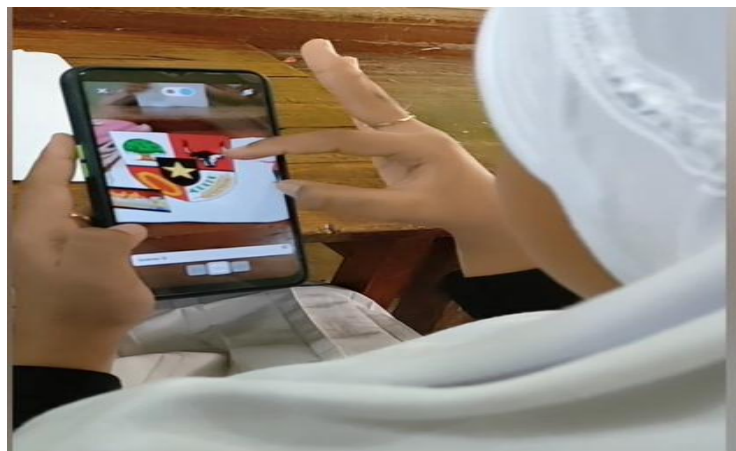
Figure 1.
Students carry out cultural literacy by looking at images of the Pancasila symbol with Assemblrr Edu

The picture above shows students looking at the topics to be discussed on their respective smartphones in accordance with cultural literacy and citizenship activities. For example, looking for the Pancasila symbol, Pancasila values and the application of Pancasila values to foster nationalism in students, of course in this activity under the guidance of the teacher to find out on the smartphones they have in the pictures available on Media Assemblr Edu. After the observations were made by the students the teacher assigned students to write an outline of the observations of Pancasila values in the picture of the eagle they saw.

The teacher then instructs students to form groups before using the Augmented Realty application in learning, in the learning process takes place under the guidance of the teacher which contains cultural and civic material content. In the observation process, it can be seen that most of the students in the class were very enthusiastic about literacy activities using mobile augmented reality. The use of augmented reality mobile applications for understanding Cultural literacy and citizenship is the ability of students to behave as part of a culture and nation in their social environment. The government utilizes literacy education as a medium for instilling the values of nationalism and patriotism in society in the millennial era through the National Literacy Movement program in Indonesia (Mokodompit et al., 2021).

Then the researcher conducted an unstructured interview with one of the students in grade 5 revealed that they were more interested in cultural and civic literacy activities using Mobile Augmented Reality because they could see in real terms in 3 dimensions and the images were interesting and could be enlarged and rotated. Interviews with the second student stated that literacy activities are more fun by practicing directly which can provide a real learning experience.

From this fact it shows that the use of learning media that is appropriate to learning materials can further introduce students to cultural literacy and citizenship, this can be seen in the display of images in the Augmented Reality application which facilitates student learning by displaying images related to literacy. culture and citizenship literacy.
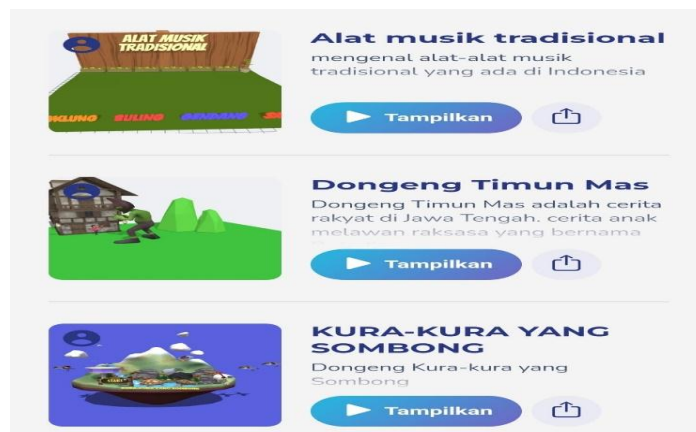
Figure 2.
Image Display in Augmented Reality Applications.

From the images in the Augmented Reality application which are used as learning media the teacher starts learning activities by reading textbooks and then combining them with viewing live images and videos in 3D form that can be rotated and enlarged. Students look focused in their learning and work together with their group mates. Students also write an outline of what they have seen in mobile augmented reality. Students are seen discussing with their friends about the things that have been observed. After the literacy activities are finished, the teacher tries to provide reinforcement by showing a short learning video related to culture and citizenship material. Students are seen listening to the teacher's explanation which is marked at the end of learning students actively ask and actively answer teacher questions to confirm.

After finishing explaining the teacher confirms by asking several questions randomly to students about the literacy activities that have been carried out. However, when confirming the students selected by the teacher to answer questions, most students understood the learning of cultural literacy and civic literacy activities. Cultural literacy and citizenship in class-based schools are carried out because the classroom is a place for students to carry out teaching and learning activities, carrying out activities such as reading books (Anas & Munir, 2019).

Researchers conducted interviews with fifth grade teachers regarding the enthusiasm of students using Media Assemblr related to cultural literacy and citizenship literacy in Pancasila and Citizenship Education subjects.

Researcher : *How enthusiastic are they in receiving learning using the Assembe Edu media on Cultural Literacy and Citizenship?*

inform: "*they are so enthusiastic about using Assemblr edu media because this media is still relatively new to them, so they need full guidance from the teacher so they understand how to operate it*".

The researcher also asked the same question to a male student in class V with the initials M.F.A :

Researcher: What is your impression of the Cultural Literacy and Citizenship Literacy materials using Media Assemblr Edu?

They report: "*cultural literacy and civics activities using learning media are very memorable and easier to remember because you can observe pictures directly then there are activities to write down the core of Pancasila values as well as musical instruments from various regions.*

From the interview above, it can be indicated that cultural literacy and citizenship activities taught by teachers with sufficient time, using modern learning approaches integrated with Augmented Reality technology and a combination of discussion and lecture methods can provide optimal results. literacy skills are important for getting to know culture and national identity, so as to foster caring attitudes towards others, mutual respect for one another, and tolerance between religious communities (Nugrohadi & Anwar, 2022)

The above facts are in accordance with research conducted by (Muali et al., 2020) that utilizing augmented reality technology as a learning medium can increase student motivation to learn about cultural literacy and civic literacy. The level of cultural literacy and citizenship of students can develop because using Mobile Augmented Reality (MAR) students are able to understand cultural literacy and citizenship through oral questions given by the teacher by looking at the pictures on their respective smartphones.

With the right approach and method students understand the material in the activity as a whole about cultural diversity in Indonesia, foster a sense of nationalism or love for regional culture and understand their rights and responsibilities to preserve regional diversity (Poçan et al., 2023). This can be proven by the pictures below. Students see directly through Augmented Reality media images that reflect the diversity of regions in Indonesia.
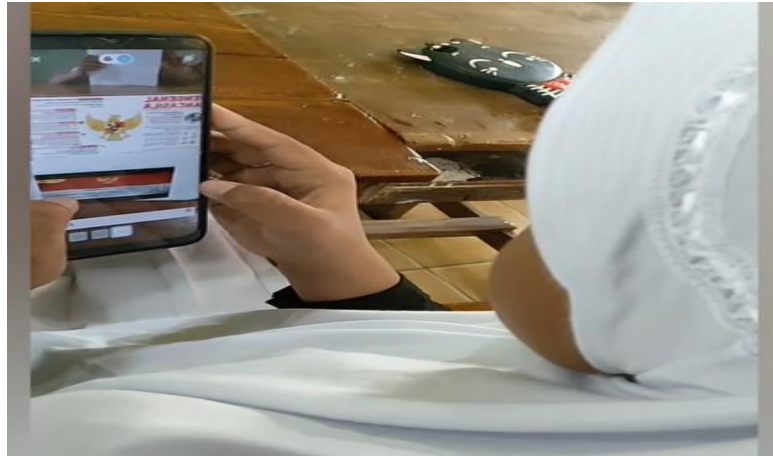
Figure 3

students do literacy values of the Pancasila symbol with the edu Assemblrr

Learning combines technological developments and cultural literacy and citizenship is the ability of individuals and communities to behave towards their social environment as part of a culture. This is in accordance with the mandate from the ministry of education in (Pratiwi & Asyarotin, 2019), related to understanding cultural literacy and citizenship as follows:

Culture. as a natural way of thinking through language and behavior, regional languages and various behaviors become the cultural wealth of the Indonesian people. Culture as a realm of thought through language and behavior means that culture becomes the soul in the language and behavior produced by a society. Regional languages and diverse manners are the cultural wealth of the Indonesian nation. Art as a Cultural Product. Art is a form of culture produced by a society. Indonesia as a large archipelagic country certainly produces various forms of art from their respective regions. Various kinds of art forms produced by each region in Indonesia must be introduced to the public, especially the younger generation so that they are not uprooted from their cultural roots and lose their national identity. Multicultural and Participatory Citizenship. Indonesia has various ethnic groups, languages, habits, customs, beliefs, and social strata. Under these conditions, a society that is able to empathize, tolerate and work together in diversity is needed. All citizens from various walks of life, class and cultural background have the same obligations and rights to participate actively in the life of the nation.

Nationalism. Awareness of nationality is an important thing that must be possessed by every citizen. With love for the nation and country, each individual will act in

accordance with the applicable rules and uphold the dignity of the nation and country. Inclusivity. In the midst of the diverse conditions of Indonesian society, views and celebrations of inclusivity play a very important role in building equality among citizens. The development of an inclusive attitude will encourage every member of society to seek universality from the new culture they are familiar with in order to improve their lives. Direct experience. To build awareness as citizens, direct experience in society is a practice that has great meaning to form an ecosystem that respects and understands each other. Based on the statement above regarding cultural literacy for elementary school children it is important to master in the 21st century.

Indonesia has various ethnic groups, languages, customs, traditions, beliefs, and social strata. As part of the world, Indonesia is also involved in the arena of global development and change, so understanding all of this needs to be improved, especially the distinctive identity/principles of local culture which are the basic content that is made into learning and introduced to students through the medium of Augmented Reality Applications.

In implementing Augmented Reality application media to introduce cultural literacy and citizenship to students is a big role in implementing cultural literacy and citizenship. The role of the teacher is described as a designer. Teachers are called designers because the teacher's job is to plan, organize, supervise, and evaluate programs in a short period of time (Wajdi, 2021).

The role of the teacher is always to prepare teaching materials and materials that are directly related to the application of cultural and civic literacy, convey values that depend on learning history and invite students to visit the library, provide reading materials on culture and social issues such as history books, pictures of traditional houses , traditional clothes (Sumardjoko, 2010)

So Mobile Augmented Reality (MAR) is a new technology that is able to combine real and virtual environments that are on portable devices, implementing technological innovations*Augmented Reality* in learning, it will create an effective learning atmosphere and provide an overview of the real world environment in computer-based learning systems (Chiang et al., 2014).*Augmented Reality* applied in the world of education because of the advantages possessed by combining real-world situations and virtual objects that can be used to overcome the complexity of learning about cultural literacy and citizenship at SD 01 Jumapolo.

From the explanation above, the results of the analysis conducted by the researcher show that cultural literacy and citizenship activities at SDN 01 Jumapolo have been carried out optimally by means of media.*Mobile Augmented Reality* (MAR). Cultural literacy is the ability to understand and act towards Indonesian culture as a national identity, while civic literacy is the ability to understand rights and obligations as citizens. Therefore

4. CLOSING

Cultural literacy and citizenship is the ability of individuals and communities to behave towards their social environment as part of a community culture and nation. Cultural literacy and citizenship at SDN 01 Jumapolo have been implemented using *Mobile Augmented Reality* (MAR) well. Teachers have integrated ICT into literacy activities and students have enthusiastically implemented literacy activities. Cultural literacy and citizenship applied using Mobile Augmented Reality (MAR) with the Edu Assemblrr application experienced an increase in students' understanding as indicated by an increase in oral and written post tests. The suggestion of this research is that school institutions, teachers and students emphasize cultural literacy and citizenship by integrating ICT.

REFERENCES

Aditama, P. W., Nyoman Widhi Adnyana, I., & Ayu Ariningsih, K. (2021). Augmented Reality Dalam Multimedia Pembelajaran. Prosiding Seminar Nasional Desain Dan Arsitektur (SENADA), 2, 176–182.

Anas, A., & Munir, N. P. (2019). Penerapan E-Learning Sebagai Media Pembelajaran Universitas Cokroaminoto Palopo. Pedagogy : Jurnal Pendidikan Matematika, 4(2), 49–57. https://doi.org/10.30605/pedagogy.v4i2.1442

Ardiansyah, A. A., & Nana. (2020). Peran Mobile Learning Sebagai Inovasi Dalam Pembelajaran Di Sekolah. Indonesian Journal of Education Research and Review, 3(1), 47–56. https://ejournal.undiksha.ac.id/index.php/IJERR/article/view/24245/pdf

Cahya, A. N., Hartono, S., Reni, R., Hasanah, N., Ajie, M. F., Dian, M., Rahman, F., Wati, E., Hidayat, A., Hidayah, N., Viana, O., Liya, R., & Rahmat, S. (2022). Penguatan Literasi Anak Di Desa Kuala Sempang Kabupaten Bintan. JPPM Kepri: Jurnal Pengabdian Dan Pemberdayaan Masyarakat Kepulauan Riau, 2(1), 13–21.

https://doi.org/10.35961/jppmkepri.v2i1.421

Cahyani, A., Listiana, I. D., & Larasati, S. P. D. (2020). Motivasi Belajar Siswa SMA pada Pembelajaran Daring di Masa Pandemi Covid-19. IQ (Ilmu Al-Qur'an): Jurnal Pendidikan Islam, 3(01), 123–140. https://doi.org/10.37542/iq.v3i01.57

Chiang, T. H. C., Yang, S. J. H., & Hwang, G. J. (2014). An augmented reality-based mobile learning system to improve students' learning achievements and motivations in natural science inquiry activities. Educational Technology and Society, 17(4), 352–365.

Desain Literasi Budaya dalam Pembelajaran Bahasa Indonesia di Perguruan Tinggi. (n.d.).

Estapa, A., & Nadolny, L. (n.d.). The Effect of an Augmented Reality Enhanced Mathematics Lesson on Student Achievement and Motivation. www.layar.com

Eva Luthfi Fakhru Ahsani, N. R. A. (2021). IMPLEMENTASI LITERASI BUDAYA DAN KEWARGAAN UNTUK MENGEMBANGKAN KETERAMPILAN SOSIAL SISWA MADRASAH IBTIDAIYAH DI TENGAH PANDEMI.

Fadillah, N., & Utomo, S. (n.d.). The Initial Efforts in Increasing Literacy Awareness through Cultural and Civic Literacy Socialization Program.

I Putu Gilang Leo Agusta. (2022). Media Augmented Reality untuk Meningkatkan Literasi Sains dan Kemampuan Metakognitif Kelas V SD. Journal for Lesson and Learning Studies, 5(2), 300–308. https://doi.org/10.23887/jlls.v5i2.50531

Internalisasi_Nilai-nilai_Karakter_Kebangsaan_Mela. (n.d.).

Kahar, M. I., Cikka, H., Afni, N., & Wahyuningsih, N. E. (n.d.). PENDIDIKAN ERA REVOLUSI INDUSTRI 4.0 MENUJU ERA SOCIETY 5.0 DI MASA PANDEMI COVID 19. In Jurnal Studi Ilmu Pengetahuan Sosial (Vol. 2, Issue 1). https://ombudsman.go.id/artikel/r/artikel--pendidikan-era-revolusi-industri-40-di-tengah-

Kementerian Pendidikan Dan Kebudayaan. (2017). Panduan Penilaian oleh Pendidik dan Satuan Pendidikan Sekolah Menengah Pertama. Kementerian Pendidikan Dan Kebudayaan Direktorat Jenderal Pendidikan Dasar Dan Menengah, 43–45. http://repositori.kemdikbud.go.id/18051/1/1. Panduan Penilaian SMP - Cetakan

Keempat 2017.pdf

Khairunnisa, S., & Aziz, T. A. (2021). Studi Literatur: Digitalisasi Dunia Pendidikan dengan Menggunakan Teknologi Augmented Reality pada Pembelajaran Matematika. Jurnal Riset Pendidikan Matematika Jakarta, 3(2), 53–62. https://doi.org/10.21009/jrpmj.v3i2.22267

Mokodompit, M. F., Paturusi, S. D. E., & Tulenan, V. (2021). Aplikasi Augmented Reality Untuk Pembelajaran Bahasa Inggris Pada Anak Sekolah Dasar. Jurnal Teknik Informatika, 16(2), 121–128.

Moleong, L. J. (2017). Metodologi Penelitian Kualitatif. Remaja Rosdakarya.

Muali, C., Setyosari, P., Purnomo, & Yuliati, L. (2020). Effects of Mobile Augmented Reality and Self-Regulated Learning on Students' Concept Understanding. International Journal of Emerging Technologies in Learning, 15(22), 218–229. https://doi.org/10.3991/ijet.v15i22.16387

Muklis, M. (2012). PEMBELAJARAN TEMATIK. In Pembelajaran Tematik FENOMENA (Vol. 1). http://www.sdnmalakasari02.com/sdn/ind3x.php?pid=06.

Nugrohadi, S., & Anwar, M. T. (2022). Pelatihan Assemblrr Edu untuk Meningkatkan Keterampilan Guru Merancang Project-based Learning Sesuai Kurikulum Merdeka Belajar. Media Penelitian Pendidikan: Jurnal Penelitian Dalam Bidang Pendidikan Dan Pengajaran, 16(1), 77–80.

Muklis, M. (2012). PEMBELAJARAN TEMATIK. In Pembelajaran Tematik FENOMENA (Vol. 1). http://www.sdnmalakasari02.com/sdn/ind3x.php?pid=06.

nur aziza, P., & Program Studi Pendidikan Sosiologi FKIP Untan Pontianak, M. (n.d.). PERAN GURU DALAM IMPLEMENTASI LITERASI BUDAYA DAN KEWARGAAN DI SMA KEMALA BHAYANGKARI.

Poçan, S., Altay, B., & Yaşaroğlu, C. (2023). The Effects of Mobile Technology on Learning Performance and Motivation in Mathematics Education. Education and Information Technologies, 28(1), 683–712. https://doi.org/10.1007/s10639-022-11166-6

Pratiwi, A., & Asyarotin, E. N. K. (2019). Implementasi literasi budaya dan kewargaan

sebagai solusi disinformasi pada generasi millennial di Indonesia. Jurnal Kajian Informasi & Perpustakaan, 7(1), 65–80. https://doi.org/10.24198/jkip.v7i1.20066

Purwodani, D. L., Sulton, & Praherdhiono, H. (2018). Prospek Pengembangan Lingkungan Belajar Digital untuk Generasi Z di Era Industri IV. Jurnal Pendidikan Universitas Negeri Malang, 3(7), 930–934. http://journal.um.ac.id/index.php/jptpp/

Putri Utami, I. W., & Muzakki, A. (2020). Analisis Pendampingan Literasi Budaya Dan Kewarganegaraan Di Era New Normal. Wahana, 72(2), 126–130. https://doi.org/10.36456/wahana.v72i2.2851

Sumardjoko, B. (2010). Faktor-Faktor Determinan Peran Dosen Dalam Penjaminan Mutu Perguruan Tinggi. Jurnal Cakrawala Pendidikan, 3(3), 294–310. https://doi.org/10.21831/cp.v3i3.359

Sural, I. (2018). Augmented reality experience: Initial perceptions of higher education students. International Journal of Instruction, 11(4), 565–576. https://doi.org/10.12973/iji.2018.11435a

Wajdi, F. (2021). Manajemen Perkembangan Siswa Sd Melalui Peran Guru Dan Orang Tua Pada Masa Pandemi. Jurnal Administrasi Dan Manajemen Pendidikan, 4(1), 41. https://doi.org/10.17977/um027v4i12021p41

Wulandari, R., Widodo, A., & Rochintaniawati, D. (2020). Penggunaan Aplikasi Augmented Reality Untuk Memfasilitasi Penguasaan Konsep Dan Keterampilan Berpikir Kreatif Peserta Didik. Jurnal Pendidikan Biologi, 11(2), 59. https://doi.org/10.17977/um052v11i2p59-69

Yusuf, R. (2020). TINJAUAN LITERASI BUDAYA DAN KEWARGAAN SISWA SMA SE-KOTA BANDA ACEH. Jurnal Pendidikan Kewarganegaraan Undiksha, 8(2). https://ejournal.undiksha.ac.id/index.php/JJPP