Strengthening civic literacy among students through digital literacy in society 5.0

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Article Info ABSTRACT

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Keywords:

Civic literacy Digital literacy Era society 5.0 Student The reading index in Indonesia is still relatively low, so many students are victims of fake news that develops on social media. In addition, students have not been able to utilize digital technology as digital literacy to the fullest, so it has implications for the weakness of knowledge about civic literacy. The research design used is a literature review and the type of qualitative research. The research method is literature, while the data collection technique uses document studies and the data analysis used is content analysis. Civic literacy has an important role in facing the era of society 5.0, with the ability of civic literacy, really helps students to participate in realizing the harmony of the life of the nation and state. Society 5.0 has a formidable challenge for higher education if each lecturer does not equip students with civic literacy skills. Strategies to strengthen civic literacy through digital literacy can be carried out effectively, by implementing varied learning methods and using digital-based learning media. Through this, students will be interested in learning, considering that students are a digital native generation who cannot be separated from digital technology. Strengthening civic literacy is very effective by utilizing digital literacy so that every student can adapt to the times, especially society in the 5.0 era.

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1. INTRODUCTION

The Preamble of the 1945 Constitution states that one of Indonesia's national aims is to educate its people. The education sector is essential to achieving this goal of ensuring the welfare of the Indonesian people, particularly in the context of the country's intellectual life. It is indisputable that governments in each nation constantly improve the education standard for their population's benefit. The goal of education is to create skilled labor [1]. The constitution specifies that the state must devote at least 20% of its budget to the education sector, which is mandated in the National Education System Law No. 20 of 2003 and Article 31 Paragraph 4 of the 1945 Constitution. Currently, the legislature is discussing the National Education System Law to improve education quality in Indonesia [2].

According to the Law on the National Education System, national education aims to develop the nation's identity. As a result, every teacher and lecturer involved in the educational process is required to incorporate character education into the courses or subjects they teach. Education practices essentially need to be able to develop lifelong learners in people [3]. Additionally, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) states that there are two essential foundations for quality education

that can develop the quality and character of human resources, namely: i) Four indicators of education, namely learning to know, learn to do, learn to live together, and learn to be yourself; and ii) Lifelong learning [4]. Education has a crucial function to develop a well-rounded individual. It plays a vital role in advancing social welfare, but issues have emerged in Indonesia's educational system over time. In addition to the country's still inefficient teacher distribution, it has been discovered that the country's academic standards have declined.

In 2021, Indonesia ranked 54th out of 78 nations based on the statistics of the World Population for education quality. With the allocations made under the state budget (APBN) and the local government (budget), which call for at least 20% of funds to go toward education, this occurrence is out of balance [5]. The low quality of education in Indonesia is attributed to several causes, including: i) Less humane learning methodologies; ii) Frequent curriculum changes; and iii) Low teacher competencies, including pedagogic, professional, social, and personality competencies [6]. According to information from the Ministry of Education and Culture's Center for Education and Culture Policy Research Center, the reading index in Indonesia is relatively low. At the provincial level, the index shows that nine provinces are moderate, twenty-four are low, and one is very low. Three provinces, Jakarta, Yogyakarta, and Riau Islands, have the highest index scores, while Papua, West Papua, and West Kalimantan are in the lowest rankings [7].

Given the poor quality of education and the low reading index in Indonesia, these phenomena cannot be disputed, especially in light of the enormous number who are easily provoked by fake news. Human existence is increasingly intertwined with digital technology, particularly social media. According to data from the Ministry of Communication and Informatics, 9,546 hoaxes are discovered on social media between August 2018 and early 2022 [8]. Irresponsible people conduct spread of fake news through social media platforms to stir up trouble and cause anxiety in the community. It turns out that different groups, including the educated and certain officials, are primarily responsible for fake news creation [9].

Social media is a technology that makes it possible to communicate virtually and share ideas easily, effectively, and efficiently [10]. Social media makes people's lives easier, especially in accessing various information and long-distance communication [11]. As a result of false information being widely disseminated and the introduction of outside culture and values into Indonesia whether they are in opposition to national identity or not many Indonesians are currently feeling the negative effects of social media and ultimately leaving behind the traditions and values of their own country [12]. Based on the results of a survey conducted by Indonesian Internet User Penetration and Behavior, internet users in Indonesia in 2017 reached 143.26 million people, or 54.68%. This data shows that internet users in Indonesia have increased when compared to the previous year, which had 132.7 million people, and it is predicted that internet users in Indonesia from year to year will always increase. The average internet user is aged 13 to 18 years (75.50%) and 19 to 14 years (74.23%) [13]. According to a study by Saputra, 97% of Indonesian students actively access or utilize social media, and smartphones are the most popular device for doing so [14]. Smartphone technology facilitates human communication and information access but also has detrimental effects on the educational sector. This circumstance makes educational issues more dynamic [15].

As the nation's future leaders, students must refrain from spreading information whose veracity cannot be readily explained. According to the study's findings, most students lack motivation, willingness, and ability to verify information independently, making them susceptible to being misled by fake news. Students are expected to be able to validate developing news to avoid being easily influenced by stories whose veracity is still in question [16]. The spread of fake news often occurs when a democratic party or election is being held. Based on data from the Ministry of Communication and Information in the 2019 election, there was 3,356 fake news spread on social media [17]. Hoax news causes problems in the community, especially creating a feeling of insecurity, discomfort, and insecurity in the life of the nation and state [18]. Social media is one of the most popular and easiest ways to spread hoax news. The motives for spreading fake news are: i) Changing public opinion; ii) Influencing policies issued by the government; iii) Criticizing a phenomenon that occurs in society; iv) Supporting community programs or activities; v) Competing in the world business; and vi) Giving concessions to legal action [19].

The world of education is also affected by technological advancements because digital technology has the potential to advance or bring about a variety of new learning resources and media outlets, particularly the internet and electronic media as knowledge sources and educational hubs. The result is that students can now learn knowledge that teachers or lecturers have not mastered because of abundant information sources [20]. However, many students are swayed by news or information that circulates on social media, which causes a lot of students to fall victim to fraud and even student disputes [21]. In essence, hoax news fosters polarisation in the public and horizontal conflicts. Since students are young individuals who will hold leadership relay in the future, this phenomenon must be anticipated immediately. Universities must take prompt action as formal educational institutions, particularly the lecturers who instruct and educate students. The approach of enhancing civic literacy in students as citizens must be fully adopted by lecturers,

particularly those who teach civic education courses because these courses aim to develop good and intelligent citizens.

2. RESEARCH METHOD

This study's design employs a literature review with a qualitative approach. In the age of society 5.0, this study investigates how students' civic literacy is strengthened through digital literacy. Since the research design is descriptive, the researcher attempts to define the function of civic literacy in navigating the society 5.0 age and the enhancement of digital literacy provided to students by lecturers. The data gathering method is document studies, thus, the information is derived from research journal articles, proceedings, books or e-books, online or printed news or newspapers, research reports, and other sources. The data were from 32 national and international journals, three books, three research reports, and three credible online media. The data analysis technique used in this research was content analysis. The content data analysis procedures included: i) Data collection; ii) Data categorization; iii) Data coding; iv) Data simplification; and v) Conclusion drawing [22]. The conclusions in this study are significant to be used as a reference for providing recommendations among related parties, especially lecturers and students.

3. RESULTS AND DISCUSSION

3.1. The role of civic literacy to face society 5.0

The capacity of citizens to address social and political issues about the government is known as civic literacy. To act politically as a citizen, civic literacy has crucial elements and fundamental points. The purpose of civic literacy for every citizen is to understand politics and apply it to their living [23]. More broadly, civic literacy can be understood as knowledge competency in participating and effecting change in the greater community or society. Civic literacy is defined as a knowledge capacity and a citizen ability to understand ideas and activities related to politics [24]. Given the quick flow of information that emerges, particularly in social media, civic literacy is crucial in the age of society 5.0. Every student must be able to examine news that grows on social media and determine if the news is accurate, plausible, or the opposite [25]. Civic literacy is essential knowledge to participate actively and successfully in life, such as expertise related to activeness in accessing and developing information, understanding politics and government, and knowing how to exercise one's rights and responsibilities as a citizen starting at the local level [26].

Since social media cannot be isolated from anything that satisfies human needs in the era of society 5.0, it, in general, plays a significant part in human existence [27]. The media is critical in educating the public, informing the public, and offering a forum for debate [28]. Society 5.0 demands people to be able to address a variety of challenges and social issues by utilizing various innovations during the era of the industrial revolution 4.0, such as the internet of things, artificial intelligence, big data (large amounts of data), and robots. It urges every citizen to master civic literacy [29]. Society 5.0 aims to develop the idea of a society that values human values through economics, education, social development, and other means to solve all societal issues. All problems that arise are anticipated to be properly and fully resolved so that people can enjoy an active, conducive, and comfortable quality of life [30].

Society 5.0 seeks to create human-centered technology that can fuse the virtual and physical worlds [31]. It means that nations worldwide have started to take various actions dealing with the potential for the re-emergence of technological developments in the industrial revolution 4.0 era. As a developed nation in technology, Japan took the lead in proposing society 5.0. The idea is to strengthen the United Nations Sustainable Development Goals, which include eradicating poverty, safeguarding the environment, and providing prosperity for the global society [32]. The Japanese government inspired the concept of society 5.0, according to Fukuyama [33]. It is indisputable that the concept of society 5.0 originated in Japan and has consequences for people worldwide. It demands that every society be capable of adapting to these changes. In the era of society 5.0, most problems are resolved by people using different technical advancements made in the industrial revolution 4.0 era [34].

The role of civic literacy in facing the era of society 5.0 is very central since this knowledge is needed to meet the challenges that arise in the current age. Through civic literacy, every community, especially students, can think creatively and innovatively by utilizing technology; for example, all human needs can be accessed via smartphones, for instance, learning and selling-purchasing activities can be done only through smartphones [35]. Civic literacy encompasses several competencies, including civic knowledge, skills, and dispositions. Civic skills refer to the ability to improve the lives of the nation and state. Civic knowledge means a concept of how to live in the society, nation, and state. Every citizen is required to possess a civic disposition, or attitude of citizenship, following the state identity [36].

For the young generation, especially students, civic literacy is urgently needed to support the development of information and technology. Advancements in technology and information must be coupled with an understanding of national insight to prevent young people from being swayed by or provoked by fake news, particularly those that appear on social media. Therefore, increasing civic literacy must be fully done to advance information and technology and serve as a filter for the younger or millennial generation [37]. Every student needs to improve their civic literacy using various methods or strategies to succeed in today's world. Moreover, a lecturer in charge of civic education courses must have a successful plan to increase students' civic literacy by utilizing technology as a learning medium.

3.2. Citizenship education strategy in strengthening civic literacy through digital literacy

Civic literacy is developed by civic education, which must be provided to all students from early childhood through higher education. Civic education must adjust to the times, in which the era of society 5.0, cannot be separated from digital technology even though it is human-centered [38]. Civic education aims to create moral and knowledgeable citizens, both Indonesian people and citizens worldwide. Citizenship education that seeks to improve digital literacy is inextricably linked to digital-based materials because one must be shrewd and astute in using digital resources, such as social media, Google Scholar, and other online databases in the age of society 5.0. The main key to strengthening civic literacy through digital literacy in civic education learning is that every student must be able to master digital technology in the 21st-century and society 5.0.

Since technology is advancing so swiftly and closely related to the internet, the 21st-century demands represent the development of digital technology, including: i) Data literacy, the capacity to comprehend, analyze, and use data and information (big data) in the digital world. It is a compulsory competency among students in the 21st-century; ii) Technology literacy, the capacity to comprehend how machinery and technological applications work; iii) Human literacy, the capacity to comprehend communication and build collaboration; iv) High order thinking skills or HOTS, which include civic engagement, cooperation, communication, critical and creative thinking, computational logic, empathy and civic responsibility; v) The demands of industrial era 4.0 and society 5.0 because the birth of society 5.0 is a response to problems that arise in the era of the industrial revolution 4.0 that cannot be resolved properly; and vi) Science mastery for the benefit of society, from local, national to global levels [39].

Citizenship education courses are very important to be given among students if the main goal is to train students to become good and intelligent citizens [40]. A lecturer in strengthening civic literacy must first master the skills in operating digital technology since the learning media are digital-based. However, nowadays, many lecturers are not familiar with digital technology, such as social media, e-learning, and so on [41]. In addition, the learning method used is monotonous, especially the lecture method, so it makes students bored, and the enthusiasm to improve civic literacy is reduced [42]. Every lecturer must anticipate it because the students they face are totally different in style than those in the 1980s or 1990s. The current students cannot be separated from digital technology, which is often referred to as the digital native generation. The methods used in the learning process must be varied and connected to digital technology. Learning methods determine learning objectives, so teachers and lecturers must be creative and innovative in determining learning methods [43]. For example, today's students are interested in online games, so a lecturer must use game learning media to attract their civic learning interest [44].

By strengthening civic literacy with digital technology, it is hoped that students will have better writing skills, so universities need to provide policies for students to increase the activities of scientific writing [45]. Suppose the strengthening of civic literacy through digital literacy can be maximally successful. In that case, students will be encouraged to write articles, journal articles, books and so on that contain the progress of the life of the nation and state. Through their work, students can also contribute to the realization of the coherence of national and state life by offering government recommendations or providing beneficial inputs to the community.

4. CONCLUSION

Education is a crucial area for developing excellent human resources, but because Indonesians now have a poor reading proficiency rate, many people especially students fall prey to false information on social media, leading to fights between students. Additionally, because current students have not been able to fully utilize digital technology, especially as it relates to digital literacy, this affects their lack of civic literacy expertise. Civic literacy is crucial in coping with the times, especially in the age of society 5.0. Fundamentally, civic literacy skills enable students to actively engage in civic life, particularly in realizing the interdependence of the lives of the nation and state. If colleges do not have strict policies connected to civic literacy and if each lecturer does not give students civic literacy skills, society 5.0 will pose severe

problems to the world of education, especially higher education. By employing efficient and diversified teaching strategies and utilizing digital-based learning resources, strategies to increase civic literacy through digital literacy can be effectively performed. As the digital native generation, which is inextricably linked to the digital world, especially smartphones, students will all be motivated to learn with technology-based media.

REFERENCES

- A. Usman, "The Role of Indonesian Constitutional Court in Strengthening Welfare State and the Rule of Law," *Lex Publica*, vol. 7, no. 1, pp. 11–27, 2020, doi: 10.58829/lp.7.1.2020.11-27.
- [2] M. Kosim, F. Muqoddam, F. Mubarok, and N. Q. Laila, "The dynamics of Islamic Education Policies in Indonesia," Cogent Education, vol. 10, no. 1, p. 2172930, 2023, doi: 10.1080/2331186X.2023.2172930.
- [3] E. Kartikasari and E. Nuryasana, "School Literacy Movement Program in Elementary School, Indonesia: Literature Review," Journal of Education and Learning (EduLearn), vol. 16, no. 3. pp. 336–341.
- [4] J. Delors, "The treasure within: Learning to know, learning to do, learning to live together and learning to be. What is the value of that treasure 15 years after its publication?," *International review of education*, vol. 59, pp. 319–330, 2013, doi: 10.1007/s11159-013-9350-8.
- [5] F. Salesman and M. M. Tapung, "The Quality Of Human Resources And The Scientific Culture Issue Post-Pandemic Covid-19 (A Case Study In Indonesia)," *Journal of Positive School Psychology*, vol. 6, no. 6, pp. 8894–8900, 2022.
- [6] C. Wardoyo, Y. D. Satrio, and D. A. Ratnasari, "An analysis of teachers' pedagogical and professional competencies in the 2013 Curriculum with the 2017-2018 revision in Accounting subject," *REiD (Research and Evaluation in Education)*, vol. 6, no. 2, pp. 142–149, 2020, doi: 10.21831/reid.v6i2.35207.
- [7] E. S. Harahap, I. Maipita, and M. F. Rahmadana, "Determinant analysis of education inequalities in Indonesia," *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, vol. 3, no. 2, pp. 1067–1082, 2020, doi: 10.33258/birci.v3i2.937.
- [8] D. Sulisworo, "The Contribution of the education system quality to improve the nation's competitiveness of Indonesia," *Journal of Education and Learning (EduLearn)*, vol. 10, no. 2, pp. 127–138, 2016, doi: 10.11591/edulearn.v10i2.3468.
- T. Kaya, "The changes in the effects of social media use of Cypriots due to COVID-19 pandemic," *Technology in society*, vol. 63, p. 101380, 2020, doi: 10.1016/j.techsoc.2020.101380.
- [10] A. M. Kaplan and M. Haenlein, "Users of The World, Unite! The Challenges and Opportunities of Social Media," Business horizons, vol. 53, no. 1, pp. 59–68, 2010.
- [11] M. Norhailawati et al., "The power of social networking sites: Student involvement toward education," International Journal of Evaluation and Research in Education, vol. 8, no. 3, pp. 549–556, 2019, doi: 10.11591/ijere.v8i3.20352.
- [12] R. Setiawan et al., "Assessing the Impacts of IT Usage, IT Adoption, and Innovation Capabilities in Increasing the Hybrid Learning Process Performance," *International Journal of Learning, Teaching and Educational Research*, vol. 21, no. 4, pp. 337– 354, 2022, doi: 10.26803/ijlter.21.4.19.
- [13] Ministry of Communication and Informatics, "APJII Internet User Behavior and Penetration Survey Results 2017 (in Indonesian)," Jakarta, 2018.
- [14] O. H. Saputra, U. Utomo, and T. S. Florentinus, "An Innovation of Music Art Learning Media in the Covid-19 Pandemic to Develop Student Character," *Catharsis*, vol. 9, no. 2, pp. 155–163, 2020, doi: 10.15294/catharsis.v9i2.45181.
- [15] K. Jared and B. Malini, "Mobile learning and integration of mobile technologies in education," Education and Information Technologies, 2014.
- [16] F. Nurrahmi and H. M. Syam, "Student information behavior and hoaks on social media (in Indonesian)," *Communicatus: Jurnal Ilmu komunikasi*, vol. 4, no. 2, pp. 129–146, Dec. 2020, doi: 10.15575/cjik.v4i2.9215.
- [17] Ministry of Communication and Informatics, "Kominfo Finds 3,356 Hoaxes, the Most in the 2019 Election (in Indonesian)," *Kementrian komunikasi dan informatika*, 2019. https://www.kominfo.go.id/content/detail/21876/kominfo-temukan-3356-hoaksterbanyak-saat-pemilu-2019/0/berita_satker.
- [18] R. Schiavo, "The role of civic literacy in infodemic management," *Journal of Communication in Healthcare*, vol. 13, no. 4. Taylor & Francis, pp. 253–255, 2020, doi: 10.1080/17538068.2020.1843293.
- [19] K. Shu, A. Sliva, S. Wang, J. Tang, and H. Liu, "Fake news detection on social media: A data mining perspective," ACM SIGKDD explorations newsletter, vol. 19, no. 1, pp. 22–36, 2017, doi: 10.1145/3137597.3137600.
- [20] A. Collins and R. Halverson, Rethinking education in the age of technology: The digital revolution and schooling in America. New York: Teachers College Press, 2018.
- [21] I. P. Cahyani, "Digital literacy of lecturers as whatsapp group users in spreading hoax informations and hate speech," *Expose: Jurnal Ilmu Komunikasi*, vol. 2, no. 2, pp. 147–163, 2019, doi: 10.33021/exp.v2i2.562.
- [22] M. Wan, "Research methods," in CSR Image Discursive Construction of Banks and the Effects on Capital Markets: Comparative Study of China and US, Singapore: Springer Nature Singapore, 2022, pp. 69–86.
- [23] K. Suryadi, "Innovation of values and communication functions political parties for strengthening civic literacy (in Indonesian)." UPI, Bandung, 2010, [Online]. Available: http://file.upi.edu/Direktori/PIDATO/5._Naskah_Orasi_Ilmiah-Prof._Karim.pdf.
- [24] D. A. Dewi and D. Budimansyah, "The Effect of Civics Learning Implementation on Improving Civic Literacy in Digital Citizenship Era," in 2nd Annual Civic Education Conference (ACEC 2019), 2020, pp. 77–81.
- [25] A. Febrian and I. Masyitoh, "Strengthening Civic Literacy through Media Literacy in Jabar Saber Hoaks," in *First International Conference on Progressive Civil Society (ICONPROCS 2019)*, 2019, pp. 79–83.
- [26] S. Masyada and E. Y. Washington, "Creating the Citizen: Critical Literacy, Civics, and the C3 Framework in Social Studies," *Research Anthology on Citizen Engagement and Activism for Social Change*, pp. 53–73, 2021, doi: 10.4018/978-1-6684-3706-3.ch004.
- [27] B. Hysa, A. Karasek, and I. Zdonek, "Social Media Usage by Different Generations as a Tool For Sustainable Tourism Marketing in Society 5.0 Idea," Sustainability (Switzerland), vol. 13, no. 3, pp. 1–27, 2021, doi: 10.3390/su13031018.
- [28] I. Irwansyah, "How Indonesia media deal with Sustainable Development Goals," E3S Web of Conferences, vol. 74, p. 08014, Dec. 2018, doi: 10.1051/e3sconf/20187408014.
- [29] D. Mourtzis, J. Angelopoulos, and N. Panopoulos, "A Literature Review of the Challenges and Opportunities of the Transition from Industry 4.0 to Society 5.0," *Energies*, vol. 15, no. 17, pp. 1–29, 2022, doi: 10.3390/en15176276.
- [30] Fukuyama M, "Society 5.0: Aiming for a New Human-centered Society," Japan SPOTLIGHT, vol. 2(1), no. August, pp. 8-13,

2018

- F. S. O. Alhefeiti, "Society 5.0 A Human-Centered Society That Balances Economic Advancement with The Resolution Of Social [31] Problems By A System That Highly Integrates Cyberspace And Physical Space," The British University in Dubai (BUiD), 2018.
- [32] Y. Shiroishi, K. Uchiyama, and N. Suzuki, "Society 5.0: For Human Security and Well-Being," Computer, vol. 51, no. 7, pp. 91-95. 2018. doi: 10.1109/MC.2018.3011041
- [33]
- U. Al Faruqi, "Future Service In Industry 5.0," Jurnal Sistem Cerdas, vol. 2, no. 1, pp. 67–79, 2019, doi: 10.37396/jsc.v2i1.21. Usmaedi, "Educatiom Curiculum for Society 5,0 to The next Decade," Jurnal Pendidikan Dasar Setiabudhi, vol. 4, no. 2, pp. 63– [34] 79.2021.
- [35] M. E. Hylton, "The Role of Civic Literacy and Social Empathy on Rates of Civic Engagement among University Students.," Journal of Higher Education Outreach and Engagement, vol. 22, no. 1, pp. 87-106, 2018.
- [36] J. Torney-Purta, J. C. Cabrera, K. C. Roohr, O. L. Liu, and J. A. Rios, "Assessing civic competency and engagement in higher education: Research background, frameworks, and directions for next-generation assessment," ETS Research Report Series, vol. 2015, no. 2, pp. 1-48, 2015, doi: 10.1002/ets2.12081.
- [37] R. Raharjo, A. Armawi, and D. Soerjo, "Strengthening Civic Literacy in the Formation of Good Citizens and Its Implications for the Personal Resilience of Young Citizens (Study on the Role of Youth of HMP PPKn Democracy in Dusun Mutiara Ilmu Foster in Jebres, Surakarta, Central Java, (Penguatan," Jurnal Ketahanan Nasional, vol. 23, no. 2, p. 51, Aug. 2017, doi: 10.22146/jkn.26457.
- A. P. Pertiwi and I. Nurhayati, "The use of smartphone-based K4P citizenship E-Learning as civic literacy strengthening in civic education courses," in 1st International Conference Of Education, Social And Humanities (INCESH 2021), 2021, pp. 56-61.
- [39] E. W. Winarni, D. Hambali, and E. P. Purwandari, "Analysis of Language and Scientific Literacy Skills for 4th Grade Elementary School Students through Discovery Learning and ICT Media.," International Journal of Instruction, vol. 13, no. 2, pp. 213–222, 2020.
- [40] R. Rachmadtullah, H. Syofyan, and Rasmitadila, "The role of civic education teachers in implementing multicultural education in elementary school students," *Universal Journal of Educational Research*, vol. 8, no. 2, pp. 540–546, 2020, doi: 10.13189/ujer.2020.080225.
- M. H. Nuryadi and P. Widiatmaka, "An analysis of civic education as a compulsory course to build the national character of [41] Indonesia," GPH-International Journal Of Educational Research, vol. 06, no. 02, pp. 1–9, 2023, doi: 10.5281/zenodo.7736807.
- [42] Y. D. Puspitarini and M. Hanif, "Using Learning Media to Increase Learning Motivation in Elementary School," Anatolian Journal of Education, vol. 4, no. 2, pp. 53-60, 2019, doi: 10.29333/aje.2019.426a.
- [43] N. D. S. Chetty et al., "Learning Styles and Teaching Styles Determine Students' Academic Performances," International Journal of Evaluation and Research in Education, vol. 8, no. 4, pp. 610-615, 2019, doi: 10.11591/ijere.v8i3. 20345.
- [44] G. Javidi, E. Sheybani, and M. Talaiver, "Improving Students' Skills, Knowledge and Abilities in Computer Programming: A Stem Project," Journal of Computing Sciences in Colleges, vol. 29, no. 2, pp. 231-232, 2013.
- [45] D. Ginting and Y. Barella, "Academic Writing Centers and the Teaching of Academic Writing at Colleges: Literature Review," Journal of Education and Learning (EduLearn), vol. 16, no. 3, pp. 350–356, 2022, doi: 10.11591/edulearn.v16i3.20473.

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