

Digital-Based Civic Education Learning Strategies to Build Character and Strengthen Understanding of Pancasila Values

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Article Info:

Received:

12/09//25

Revised:

05/06/26

Accepted:

08/06/26

ABSTRACT

The foreword of this study highlights the changes in Civics learning in the digital era, which demands more adaptive strategies to shape students' character and strengthen their understanding of Pancasila values. The purpose of this study is to formulate a digital-based Civics learning strategy that can support the internalization of Pancasila values and strengthen students' character. The method used is a literature study with a descriptive qualitative approach through content analysis of books, journal articles, and relevant previous research results. Important research results indicate that models such as blended learning, distance learning, mobile learning, and virtual learning environments contribute to strengthening the values of deliberation, tolerance, independence, responsibility, democracy, and mutual cooperation. The implication is that digital-based Civics learning can be an effective strategy for developing students who are critical, adaptive, have character, and have the spirit of Pancasila in their daily lives.

Keywords: Learning, Digital, Character, Pancasila Values



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INTRODUCTION

The rapid development of digital technology has changed the mindset and learning style of students, especially the digital native generation [1]. Traditional Civic Education (PKN) learning is no longer effective enough to form adaptive, critical, and strong characters in students. The implementation of digital-based PKN learning has emerged as a new paradigm that is adaptive to technological developments to strengthen students' characters, such as the value of unity in diversity. Digital-based PKN learning [2] can be an effective medium for instilling character values, especially tolerance, unity, and diversity, so that students can become democratic, creative citizens and have 21st-century competencies (4C: critical thinking, creativity, collaboration, communication). The use of digital technology must be able to increase students' interest in learning and make the learning process more interactive and relevant to their daily lives [3].

However, in practice, not all schools and teachers are able to optimally integrate digital technology into learning, one of which is in civics education. It is not uncommon for teachers to still use conventional methods that are less attractive to digital generation students [4]. Limited infrastructure and a lack of training for teachers are also obstacles. This results in less than optimal character formation in students and does not fully meet the needs of digital generation students who live in the era of technology and information. [5]. This issue is important because the younger generation is the future leader of the nation who must have a strong national character to maintain unity amidst Indonesia's diversity. The lack of instilling values such as tolerance, unity, and appreciation for diversity can trigger social conflict and threaten the integrity of the Republic of Indonesia [6]. In the digital era, students are also vulnerable to the negative influence of technology if they are not guided with appropriate learning. Deci and Ryan's (2000) Self-Determination Theory highlights the importance of intrinsic motivation based on the need for autonomy, competence, and social connectedness. This can be linked to digital learning models that strengthen character through learning that provides freedom to learn (autonomy), mastery of material (competence), and collaboration (connectedness).

Marc Prensky, who first introduced the term digital native, explained that this generation has a natural affinity for technology, learns quickly through digital experiences, and requires interactive and

multimedia learning media [7]. Many studies have been conducted on digital-based civics learning, with a primary focus on increasing students' interest, motivation, and understanding of civics material through various interactive digital media. For example, Sunaryati et al. (2025) found that the use of digital media in civics learning in elementary schools increased students' enthusiasm and active participation, thus having a positive impact on their learning outcomes. In addition, the implementation of interactive multimedia such as simulations, animations, and quizzes based on information technology has proven effective in visualizing abstract civics concepts, thereby facilitating student understanding. Problem-based learning models that utilize digital video media also help students develop critical thinking skills and apply civics concepts in their daily lives.

Several previous studies have also examined the implementation of digital citizenship education during the COVID-19 pandemic, which confirmed that teachers were able to integrate digital technologies such as Zoom and Google Classroom into the learning process despite infrastructure constraints and teacher readiness issues. More recent studies have even developed immersive learning-based citizenship education models that emphasize reflective, collaborative, and contextual learning to improve the quality of learning and strengthen the character of digital generation students [8].

Most studies have identified barriers related to technological infrastructure, limited internet access, and low digital literacy among teachers and students, which have hampered the optimal implementation of digital learning. This opens up opportunities for research that not only develops digital-based learning models but also integrates contextual and applied approaches to national character values. Furthermore, various studies have confirmed that the use of digital media can make learning more interactive, flexible, and in line with the characteristics of the digital generation, which is accustomed to visual, fast-paced, and technology-based learning. However, these studies tend to be stand-alone and focus more on the effectiveness of media or learning methods in general, rather than on a truly targeted synthesis to develop a structured Civics learning model. Furthermore, there is still little research that specifically links digital learning to strengthening student character and internalizing Pancasila values in the context of civics education in Indonesia.

The uniqueness of this research lies in its focus on strengthening the character of digital generation students through citizenship education (PKN) in understanding Pancasila values based on digital learning that combines aspects of technology, pedagogy, and national values simultaneously. Another novelty is the approach that adapts to the characteristics of the digital generation as a concrete and relevant character building framework for the Indonesian socio-cultural context. This research contributes to filling the knowledge gap by developing a digital-based citizenship education learning model that not only improves digital skills but also encourages the internalization of strong national character values among students. This model is expected to serve as a practical guide for teachers in overcoming technical obstacles while building students' character as digitally literate citizens who uphold Indonesia's diversity. Therefore, this research offers a specific contribution in the form of the formulation of a digital-based PKN learning model that integrates aspects of technology, pedagogy, and the strengthening of national values, so that it not only supports students' digital skills but also forms the character of critical, tolerant, and Pancasila-spirited citizens.

METHOD

This study uses a literature observation method with a descriptive qualitative approach; the research population includes all literature related to digital-based Citizenship Education learning, character building, and understanding of Pancasila values, while the research sample is in the form of books, journal articles, and previous research results selected purposively based on topic relevance, the data collection instrument in this study is the researcher himself supported by a literature recording sheet, the data collection technique is carried out through documentation studies by tracing, selecting, and grouping appropriate library sources, the data analysis technique uses descriptive content analysis to identify, compare, and synthesize the main findings, the research stages include determining the focus of the study, literature search, selection of relevant sources, data recording, theme grouping, content analysis, and preparation of a concept synthesis regarding effective digital-based Citizenship Education learning strategies.

RESULTS AND DISCUSSION

The findings of this study confirm several previous theories and studies that emphasize the role of digital media in enriching the learning experience of the digital generation [9]. As stated by Prensky (2001), the digital generation tends to learn quickly through interactive technology, so that optimally implemented digital-based learning models support this characteristic. The increase in student motivation and digital competence is in line with the results of research by Sunaryati (2025), which confirmed that interactive digital media triggers enthusiasm and active participation of students in civic education learning. In addition, the successful internalization of national character values through digital media strengthens Suryani's findings on the effectiveness of interactive multimedia in visualizing abstract concepts of citizenship.

Character education is understood as a learning process that aims to shape the national personality in students, so that they have values and traits that are their distinctive characteristics [10]. They are expected to be able to practice these values in their personal lives, in their roles as members of society, and as citizens who are religious, love their country, are productive, and creative. Thomas Lickona argues that simply having an understanding of moral values is not enough to become a person of character. These moral values must be accompanied by moral character (1991: 53). This character includes three main elements, namely moral knowledge, moral feelings or emotions, and moral actions or behavior. [11].

Learning models in today's digital era are very different from conventional learning models. In general, there are several main models in digital era learning that have been developed to meet the needs of the digital native generation, which is very adaptable to technology [12]. The first model is when educators provide materials online, which are then downloaded by students to study independently outside the internet network (offline). The second model involves a completely online learning process, where teachers provide materials online, and students also learn directly online through videos, modules, or digital learning platforms. The third model is blended learning, which is a combination of online and offline face-to-face learning, where later will provide a more flexible and interactive learning experience.

In addition, there is also a self-directed learning model that allows students to access various online learning resources without having to be directly tied to a teacher or lecturer. With the support of a wide internet network, this model facilitates personal and independent learning, without direct guidance from teaching staff directly. In this digital era, various innovative approaches have also developed, such as flipped learning, where students study the material independently before class sessions are used for discussion and practice [13]. Mobile learning is also becoming a popular model, allowing students to learn anytime and anywhere with a smartphone or tablet. The project-based learning model requires active engagement, problem-solving, and collaboration, which are relevant to the formation of 21st-century character and skills.

Don Tapscott explains how the digital native generation has distinctive psychological traits, such as openness to technology, a preference for multitasking, visual-based learning, and a need for continuous feedback and interactive experiences, which can guide character-building strategies. Digital media provides interactive, contextual, and collaborative learning experiences that encourage critical, adaptive, and resilient character development in students. [14]. Technology-based learning improves moral reasoning, decision-making, communication, creativity, and collaboration skills. The following are learning models in today's digital era:

Blended learning is a learning method that combines various delivery methods, teaching models, and learning styles, including a combination of face-to-face and online learning. This learning model not only provides convenience and flexibility in the learning process, but also emphasizes the importance of effective social interaction between facilitators and students. In blended learning, students not only receive material online, but also participate in discussions and live activities, creating a more personalized, interactive, and contextual learning experience [15].

The main advantages of blended learning as a combination of face-to-face and online teaching include increased learning flexibility, which allows students to choose the time and place of study according to their needs, and the development of self-directed learning, where students learn to manage their time and responsibilities independently. In addition, blended learning also increases student interactivity and engagement through a combination of face-to-face interaction and online discussions, and allows the use of various educational media and technologies that support various student learning

styles. This model also improves the quality of communication between teachers and students and between students themselves, thus encouraging collaboration and open dialogue. The diversity of learning methods and media used in blended learning can increase student learning motivation. Thus, blended learning effectively combines various teaching methods and learning styles and supports an open and communicative learning process among all parties involved, including teachers, students, and parents [16]. Therefore, this model is very relevant to meet the needs of education in the era of the Industrial Revolution 4.0 and rapid technological developments.

Distance learning has undergone significant development since it first appeared in the 19th century, particularly in 1883. Initially, distance learning was based on a correspondence system that used letters to connect teachers and students, enabling learning without the need for face-to-face meetings [17]. As science and technology advanced, the concept of distance learning also evolved through various phases, reflecting the development of the media and communication methods used. In its development, distance learning has gone through several important phases. The initial phase used correspondence methods, then progressed to the use of radio, television, and satellite systems such as Palapa to deliver learning materials. With the advancement of digital technology and the internet, the distance learning model has entered a phase of innovation supported by increasingly sophisticated communication and information technology, enabling real-time and interactive learning even though students and teachers are geographically separated [17].

The current generation of distance learning encompasses five models, ranging from traditional correspondence, multimedia models, e-learning, to smarter, flexible learning supported by the latest information technology. E-learning is an essential part of modern distance learning that relies on the internet and various digital learning platforms to expand access to education more equitably and provide high-quality education. In the context of regulations in Indonesia, distance learning is regulated by Law No. 12 of 2012 concerning Higher Education and Regulation of the Minister of Education and Culture No. 24 of 2012, which emphasizes that distance learning is a teaching and learning process carried out without face-to-face interaction, using communication media as the primary means. The goal is to provide access to education for students who cannot attend face-to-face education without sacrificing quality standards, while supporting the equitable distribution of relevant and quality learning opportunities.

Mobile Learning (M-Learning) is a learning model that utilizes wireless mobile technology, such as smartphones, tablets, PDAs, and other mobile devices, to provide easy access to information and learning materials anytime and anywhere. [18]. By using mobile learning, students are encouraged to be more active in learning because they are not limited by space and time, so that learning can take place flexibly according to their wishes without disrupting other tasks and responsibilities. According to Mohammad Ally in his book "Mobile Learning: Transforming the Delivery of Education and Training," mobile learning allows anyone to access learning materials freely through wireless technology, empowering learners to learn wherever and whenever they want. Thus, mobile learning is changing the traditional way of obtaining education and training, offering a more dynamic, personalized, and accessible learning experience for everyone.

Virtual Learning Environment (VLE) is a web-based platform designed to support the learning process in digital aspects, which is commonly used by various educational institutions. [19]. This virtual learning environment combines various components that utilize the advantages of computer-based learning and digital teaching spaces to provide convenience and flexibility in learning. One of the main features of VLE is a virtual space that functions as a center for student activity. This space allows students to move freely within it and encourages them to take responsibility for their own learning process. Learning materials in VLE are usually provided in various formats, such as computer-based learning programs, lecture notes, and self-assessment modules that can help students evaluate their understanding independently.

Student interaction is also facilitated through simple discussion forums within the platform, including features like Cyber Tutor, a link that allows students to communicate with teaching staff via email. Within this system, teaching staff can remain anonymous, and multiple staff members can take turns acting as virtual tutors during lectures. While staff are anonymous, student identities are protected through the use of pseudonymous email addresses. The VLE also provides a variety of downloadable learning materials for students to facilitate their understanding, such as exams, lab reports, posters,

lectures, and other technical support. The effectiveness of these virtual learning resources is evaluated through surveys, focus groups, and online feedback from students.

A key advantage of VLEs is 24/7 access to learning materials, allowing students to study at any time that suits their lifestyle. This makes VLEs highly relevant and supports flexible, independent, and accessible learning for a digital generation accustomed to modern technology. As such, VLEs can significantly enhance the learning experience in today's digital education era.

Digital-era learning design is a crucial activity in developing learning that requires time and special attention because it must be adapted to specific principles of digital learning, such as freedom, independence, flexibility, timeliness, adaptability, mobility, and the principles of effectiveness and efficiency. Each developer has their own way of creating this design. According to Lance J. Richards and his colleagues, there are several key components in digital learning design that can be applied, including: selecting digital learning management tools or facilities, planning or organizing digital learning programs, placement or installation of materials (content grouping), the use of appropriate interactive learning and teaching strategies, and the application of adult learning principles. In addition, digital learning design must use a student-centered approach, integrate authentic assessments, be oriented towards digital systems and training technologies, and provide information on appropriate infrastructure that supports learning. [20] .

These principles require designs that not only adapt to the needs and characteristics of the digital native generation, but also prioritize active student engagement, flexibility in the learning process, and the strategic and effective use of information and communication technology. For example, effective learning designs must be based on systematic instructional design, pay attention to personalized learning, and be able to provide interactive, adaptive, and contextual learning experiences. The design must also consider the availability of technology and infrastructure support so that digital learning can run smoothly and produce optimal results. Thus, digital-era learning design is a complex process that integrates various elements and principles of modern learning to create an efficient and engaging learning environment that can comprehensively develop students' character and abilities in accordance with the demands of today's digital era in [Figure 1](#).

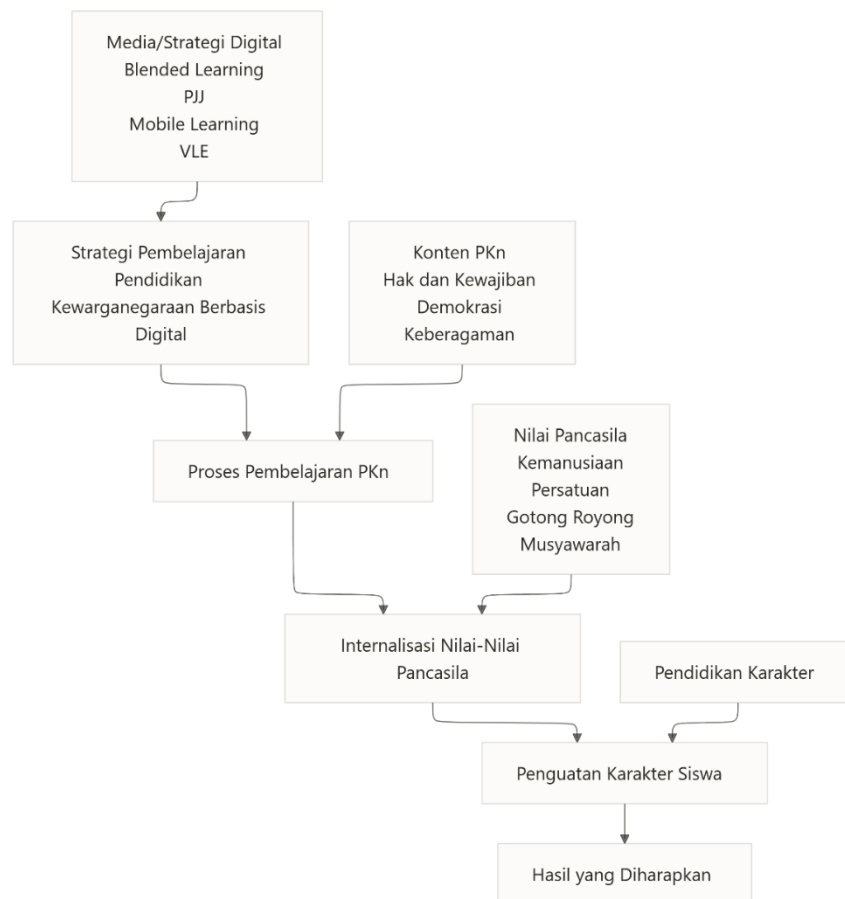


Figure 1. Digital-based citizenship education learning

Figure 1, the study results show that digital-based Civic Education learning not only serves as a means of delivering material but also as a strategic medium for strengthening Pancasila values and building the character of digital generation students. Various digital learning models exist in literature, such as blended learning, learning distance learning, mobile learning, and virtual learning environments, have mutual contributions complete in the internalization process values nationality. Blended learning strengthens mark deliberation, mutual cooperation, and responsibility answer through combination interaction face encouraging face and courage student think, work the same, and mutual value opinion. This model also helps student Study manage time, discipline, and independence, which are part from formation Pancasila character that is oriented towards togetherness and responsibility answer social.

Learning distance Far give contribution to strengthening mark unity in diversity with open access learn more broad, flexible, and inclusive for student from various background behind [21]. In context Civics, this allows permanent teachers implant values nationality although participant educate Study from different locations. In addition, that, learning distance Far push student for more independent, responsible, and adaptive, so character nationality No only built through material, but also through a learning process that demands discipline and independence. With Thus, this model relevant For support please second and third Pancasila because grow attitude humanity, tolerance and brotherhood in the learning process.

Flexible access through device mobile create a learning process more personal and participant - centered educate, so that student own room more big For understand material Civics in a way independent and reflective. In context character, mobile learning helps build not quite enough responsibility, perseverance, and digital literacy, all at once demand student for use technology in a way wise and ethical. This is in line with the emphasized values of Pancasila to dignity humans and equality chance Study.

Temporary that, virtual learning environment (VLE) plays a role important in build values of mutual cooperation, democracy and openness through discussion forums, spaces collaboration, and courage structured interactions. In VLE, students can convey opinion, responding view friends, and dialogue in a way open in relative atmosphere safe and equal. This process practice ability think critical, respectful differences, as well as build awareness as participatory citizens. VLE also supports more learning reflective and collaborative, so strengthening character No only occurs in aspects knowledge, but also attitudes and actions appropriate social with Pancasila values.

If synthesized in a way Overall, the four digital learning models show that strengthening the values of Pancasila in Civics happen through two track main, namely track pedagogical and pathways character. Path pedagogical looks through design flexible, interactive, and student - centered learning, while track character looks through experience learning that grows not quite enough responsibility, tolerance, independence, collaboration, and attitude democratic. In other words, learning Civics digital-based to become effective No solely Because use technology, but Because technology the used For create experience learning that instills the values of Pancasila in general real in activity Study student.

Based on synthesis mentioned, learning model Civics the most effective digital- based is a model that integrates interaction face face, dare access, learning independent, and space digital collaborative in One mutual unity support. Integrated model This allows teachers not to only convey material citizenship, but also guiding student for internalize and instill the values of Pancasila in close digital context with life they. With Thus, learning Civics digital- based potential become strong strategy to form students become citizens who have character, are adaptive, and are committed to unity nation.

As seen in Figure 2, Blended learning strengthens mark deliberation, tolerance, and mutual cooperation because student interact Good in a way face advance and brave, so that they Study discuss, appreciate opinion, and work the same in finish assignments. Learning distance Far grow independence, discipline, and responsibility answer Because student sued For arrange time, following learning in a way independent, and remain guard commitment Study although without supervision direct [22]. Mobile learning supports values humanity and justice Because give access learns more flexible and inclusive, so student can Study When anywhere and anytime in accordance need, they. Meanwhile that, the environment virtual learning strengthens mark democracy, openness, and participation Because provide room digital discussions that enable student convey opinion, convey other people's ideas, and practice communicate in a way polite in room virtual public.

If synthesized more far, the fourth model this forms character student through three track main. First, the path cognitive, namely expand understanding student to material citizenship, rights and

obligations citizens, as well as meaning the values of Pancasila in life real. Second, the path affective, namely grow attitude tolerant, respectful differences, empathy, and sense of responsibility answer to fellow. Third, the path behavior, namely push student For show action real like Work same, participate active, applying discipline, and use technology in a way wise [23] . With Thus, these digital learning models No only increase knowledge, but also forms habits think and act in harmony with Pancasila character.

Conceptual relationship framework



Figure 2. Conceptual relationship framework

In the context of Citizenship Education, the most powerful digital learning model is a model that is capable of connect content materials, digital strategies, and goals education character in a way integrated. This means that technology No objective end, but rather tool for create experience learning that encourages student understand the values of Pancasila in general deep and instill it in life every day. Therefore that, synthesis from various digital learning models show that its effectiveness lies in the capabilities of the model for make student more active, independent, collaborative, democratic, and responsible answer as citizens. In other words, learning Civics digital- based strengthens Pancasila not only through delivery material, but through a learning process that shapes character and behavior citizenship in a way real.

CONCLUSION

Based on the results of the study, digital-based Civics (PKN) learning has been proven to play a significant role in strengthening students' character and understanding of Pancasila values. Learning models such as blended learning, distance learning, mobile learning, and virtual learning environments not only facilitate access to learning but also foster the values of deliberation, tolerance, independence, responsibility, mutual cooperation, and a democratic attitude. Digital learning in PKN is effective because it is able to connect aspects of students' knowledge, attitudes, and behavior in an integrated manner. Through interactive, flexible, and collaborative learning experiences, students are encouraged to more actively understand and practice Pancasila values in their daily lives. Thus, digital-based PKN learning strategies can be a relevant approach to shaping a young generation that is critical, adaptive, character-driven, and imbued with the spirit of Pancasila.

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