21ST CENTURY SKILL-BASED CITIZENSHIP INTELLIGENCE DEVELOPMENT IN DISTANCE EDUCATION: *AN ALTERNATIVE FOR CHARACTER EDUCATION*

Kusnadi

Universitas Terbuka (INDONESIA)
koes@ecampus.ut.ac.id

Abstract

Citizenship intelligence is a person's ability to play his role proactively as a citizen and citizen of a complex life system based on the nation's normative identity. Someone with citizenship intelligence will show performance as a citizen who cares about social conditions, is honest in responding to various existing phenomena, is critical of existing conditions, and is harsh in dealing with various life problems he experiences. If this citizenship intelligence thrives in a person, he will become a good citizen. Thus, the key to the formation of good citizens is civic intelligence. To cultivate civic intelligence, a skill that can look far ahead is needed, namely 21st-century skills and a flexible educational process from various points of view, namely distance education. The process of linking distance education to realizing civic intelligence by developing 21st-century skills is a process of character education in analyzing this phenomenon using the literature study method. This article discusses civic intelligence as a normative identity, 21st-century skills in distance learning, distance education as a process of developing civic intelligence, and character education embody civility.

Keywords: Citizenship Intelligence, 21st Century Skills, Distance Education, and Character Education

1 INTRODUCTION

Developing skills-based civic intelligence in the 21st century is an era of knowledge that transcends place and time globally. Where it no longer requires a static place and time but has high-speed mobility so that 21st-century national education also seeks to do things that encourage and at the same time adapt to these conditions, among others: 1) growing the capacity to shape the civilization and character of a respectable nation in the context of educating the nation's life. 2) growing the capacity of students to become superior human beings, have faith and fear of God Almighty, have a noble character, are healthy, knowledgeable, and capable of being independent, imaginative, and significantly involved in a pluralistic society (June, Mahuda, & Kusuma, 2020; Wijaya, Sudjimat, & Kyoto, 2016). In the 21st century, improving education is essential to ensure that children can learn and use media skills, innovation (learning and innovation skills), media, information and technology skills, and the ability to work to maintain one's way of life and professional ability. Regarding such conditions, education with dynamic and innovative learning is needed without being constrained by place and time; distance education is one of the most appropriate and appropriate.

According to Moore & Kearsley in Damayanti, distance education differs from face-to-face education in the way learning is delivered, especially the physical distance between teachers and

students. Students enrolled in distance education should be more independent learners than those enrolled in face-to-face classes. In distance learning, teachers and students communicate using various media, which serve as vehicles for delivering the learning structure. Three parties, including students, teachers, and the learning structure, are involved in the conversation about distance learning (Albiladi & Alshareef, 2019; Darmayanti, 2008).

Given globalization's current state, science and technology development is becoming more sophisticated. Teachers are required to play a more significant and innovative role with personality. Society is not quite ready to face the magnitude of natural changes and the acceleration of the progress of science and technology itself, or what is often referred to as globalization. In connection with the emergence of globalization, the quality of education needs to be improved. Schools, as one of the needs of educational institutions, have creativity in thinking (critical thinking, creative, problem solving, problem-solving), speaking (Communication), and cooperation (collaboration) or what is often referred to as 4C (Septikasari, 2018). The industrial revolution 4.0, or the fourth industrial revolution, is a feature of the 21st century and marks the beginning of the period of globalization. When the Industrial Revolution 4.0 is running, Indonesia is entering it. It is hoped that it will increase job prospects, be more expansive and make human workers more efficient and productive. The 21st century has brought many changes in human life and demands excellent human resources in all jobs and endeavours (Mardhiyah, Chitta, & Zulfikar, 2021).

Education is becoming increasingly important in the 21st century, especially distance education, where students can learn and innovate, use technology and information media, work, and survive using life skills. Dasim Budimansyah confirms that education can help a person become more responsible, intellectual, and creative by increasing his talents and intelligence, especially in civic intelligence (Budimansyah, Suharto, & Nurulpaik, 2019). The young generation with good citizenship is the result. One of the things that can support the integrity of a nation is civic intelligence. In society, state and national life, this generation is referred to as a good and educated citizen (competent and good citizen). In addition, the younger generation will behave politely in public (public civility) because of civic intelligence. The development of specific talents to face the challenges of 21st-century development, students are prepared to become responsible and trustworthy generations in the future. Therefore, it is necessary to have 21st-century abilities, also known as 4C talents(Rohman & Jardin, 2021; Shah et al., 2007; Use & Puspitaningrum, 2022). Based on this background, this article discusses developing 21st-century skill-based civic intelligence in distance education as alternative character education. In addition, this article also

discusses civic intelligence as a normative identity, 21st Century Skills in Distance Learning, and 21st Century Skills-Based Citizenship Intelligence Development in Distance Education (PJJ).

2   METHODOLOGY

The method used in the analysis of this discussion is a literature study. A literature study is a theoretical study, references and other scientific literature related to the culture, values and norms that developed in the social situation under study. (Sugiyono, 2015). Literature Study conducts research by studying and reading literature related to the problems that are the object of research. In the literature study method, the author will discuss the sources that go into it.

The literature study will use all types of literature as references. So, in this case, many sources of information can be studied, including scientific journals, books, mass media information, and the internet. In conducting research using the literature study method, the author must study various references related to the discussion material. This process is critical because it provides colour enrichment analysis and improves the articles' quality. The purpose of using the literature study method is: To find a Problem or Topic, Finding Relevant Information, Reviewing Relevant Theories, seek theoretical foundations, and deepen the author's understanding and knowledge (Muktaf, 2016).

3   FINDINGS AND DISCUSSION

3.1   Citizenship Intelligence as Normative Identity

Citizenship intelligence as a normative identity must be able to face and simultaneously find solutions to the negative impacts of the development of technology and information globally. The progress of globalization today is a necessity that cannot be ignored. Indonesia has followed the process of globalization, thus allowing difficulties in the life of the nation and state to be associated with global concerns. It can damage national pride. All aspects of the country must take lessons from history. Must be informed about various events, including separatist movements, conflicts, ethnic groupings and SARA incidents that endanger the country's stability and bring it to its knees. There is no reason to repeat the loss of life, property and prolonged trauma. The Indonesian nation must develop into an intelligent citizen. Intelligence Citizenship is a set of principles found in the value system of intelligence is one of the self-compassion of citizens, including beliefs and goals that individuals have or express, aspirations that are articulated, attitudes that are shown or shown, feelings and behaviours that are prioritized to be carried out, and concerns. Voiced or observed (Kusnadi, 2021; Masrukhi, 2018).

Distance education needs to play a more significant role in developing the civilized civil intelligence that society needs to survive the changes and demands of the 21st century. Citizenship

intelligent people will be able to play an active and successful role in the life of society, the state, and the state. This is possible because people with civil intelligence can develop civic responsibilities, realize their rights and responsibilities as citizens, and engage in public affairs. In order to produce a young generation that is intelligent, qualified, superior, and empowered, the philosophical orientation, goals, and culture of 21st-century Citizenship Education must be in line with or directed at realizing the intelligence of citizens through the corridor of "value-based" character education to realize public civility (Crick, 2007; Osanloo, 2009; Use & Puspitaningrum, 2022). In addition, seven abilities must be fostered to foster civic intelligence: civic knowledge, civic skills, civic disposition, civic confidence, civic commitment, civic competence, and civic culture (Hamidi & Lutfi, 2010; Tirtaraharja, 2005; Winataputra, 2001).
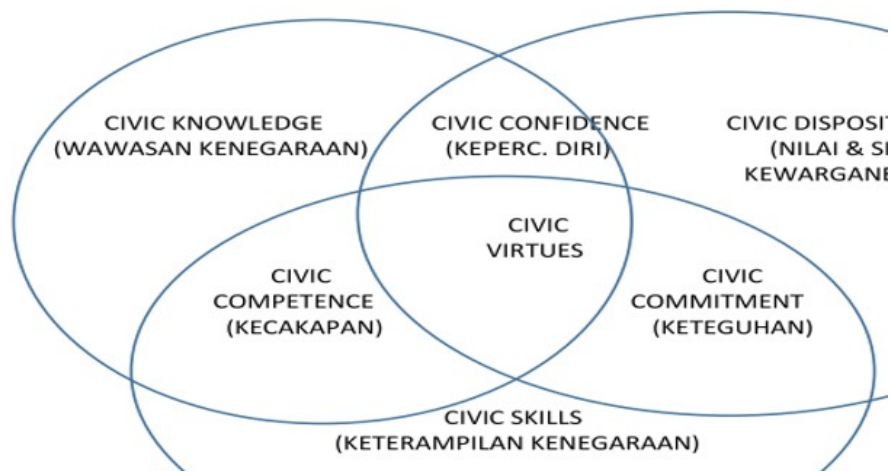
Figure 1. Seven Citizenship Intelligence Skills

According to Winataputra, citizenship policy is at the heart of the personality of citizens (civic virtue). Citizenship knowledge/knowledge, civic disposition, civic skills, commitment, confidence, and skills must all be developed to help grow civic competence. Overall, everyone needs this citizenship policy to be willing and able to engage in knowledgeable and responsible civic engagement(Hoskins & Crick, 2008; Nadzmi Akbar, 2016; Winataputra, 2001).

3.2   21st-Century Skills in Distance Learning

21st-century skills in learning, especially distance learning, must be able to be carried out and developed according to the needs of the learning process so that the proclaimed skills will be achieved and can be applied in life, especially in the era of globalization by adjusting the development of technology and information that is not limited. Many organizations seek to develop the competencies and skills needed in the 21st century. However, it is essential to

remember that it is impossible to educate children through only one method in the 21st century. The Harvard and Wagner University Change Leadership Group identified that students must have the necessary competencies and mechanisms to deal with seven problems in life, the workplace, and citizenship in the 21st century. These seven abilities include (1) critical thinking and problem-solving skills, (2) teamwork and collaboration, (3) initiative and entrepreneurial spirit, (3) agility and flexibility, (4) leadership, (5) effective oral and written communication skills, (6) accessing and analyzing information (7) curiosity and creativity. (Al Munawaroh & Dewi, 2021; Zubaidah, 2016).

Every element of life is influenced by technology and information, especially in the era of the 21st century, which is a century that sees the transition from industry to a knowledge-based civilization. The internet makes it easier for people to increase their knowledge and information. In addition, the internet also makes it easier for people to access data from all over the world. Ecology and society, however, will be negatively affected by these advances. The uncontrolled spread of information worldwide is causing a significant digital boom. Therefore, people try to sort and choose the information they need. They can choose reliable sources (Kurniawan, Sriasih, & Nurjaya, 2017; Lestari & Santoso, 2019; Trisnawati & Sari, 2019).

Various aspects of human life have been affected by the industrial revolution, including the world of education. The changes in the industry include the following. Effects of the Industrial Revolution 4.0 on education and learning (The Duke Perspective 2019)

1. Students have expectations based on technology and can project for the future job market. Work readiness, in addition to knowing their field, future generations must also be trained. They are using the latest technology. Students should acquire proficiency through practical learning in terms of how they will use technology in their future work ahead of them.

2. Learn to be more independent. It is time for education to give more people the opportunity to understand each student's performance strengths and weaknesses or individualized teaching. Therefore, nowadays, the web is viral everyone can learn what they want at their leisure. The concept of education must develop. Further, teachers will evaluate student behaviour, performance, and other factors. In addition, it also provides independent learning opportunities for students. If a student has a learning problem, the teacher can find suitable strategies and approaches to teaching with different styles. However, much training is required so the teacher can understand and apply the learning.

3. The Internet of Things (IoT) dominates. What is the Internet of Things created for both now and in the future for human convenience? In specific locations, modern schools are equipped

with tracking devices, wireless door locks, sensors for ambient temperature, security cameras, and other smart gadgets. An essential component of this procedure is convenience if advanced technology could be more accessible for someone to work because the workplace and classrooms are more comfortable or concentrate more on activities(Singh, 2003; Wijaya et al., 2016; Zubaidah, 2019).

Learning, especially in 21st-century learning, there are several changes or transitions from learning before the 21st century to 21st-century learning, which can be described as follows:

<p align="center">Table 2. 21st-Century Learning Changes</p>

No	Aspect	Before the 21st century	After 21st Century
1	Focus	Teacher centred	Student-centred
2	Learning model	Direct	interactive
3	Contents	Knowledge	skills
4	Process	Results based	Process-based
5	skill	Base	Applied
6	Concept	Facts and principles	Problems and solutions
7	Study	Theory	Practice
8	Learning methods	Competition	Collaboration
9	A place to learn	Class	Global Society
10	Task	Based on writing on paper	Web-based

Source: (Widodo & Wardani, 2020)

In addition, it is also necessary to know about 21st-century skills known as the 4 Cs, namely Critical thinking, creativity, collaboration, and Communication skills. All educational institutions often address the need for 21st-century capabilities. These organizations strive to teach their students how to master skills that include critical thinking, collaboration, effective Communication, and creativity, collectively known as 21st-century skills. This aligns with the Partnership for 21st Century Skills (P21). This US-based organization states that the competencies needed by human resources in the 21st century are critical thinking, creative thinking, Communication, and collaboration skills or collaboration skills. The characteristics of the 21st century with a more suitable learning model can be described as follows:

Table 3. 21st Century Learning Paradigm Shift

1	Information	→	Learning is directed at encouraging students to find out from various sources, not being told
2	Computing	→	Learning is directed at being able to formulate problems, not just solving problems
3	Automation	→	Learning is directed at being able to think analytically, not mechanically
4	Communication	→	Learning emphasizes the importance of cooperation and collaboration in solving problems

Source: https://belajarngajar9.blogspot.com/2015/03/pembelajaran-abad-21.html

3.3 21st Century Skill-Based Citizenship Intelligence Development in Distance Education

The development of civic intelligence based on 21st-century skills in distance education can be seen and analyzed in various components that support the learning process in distance education. The distance education system (PJJ) is considered the invention of the 21st-century learning system; it is an education system with a broad reach across location, time, and socioeconomic. Anyone anywhere and anytime has access to education, thanks to the PJJ system. With adequate quality, the PJJ system is often seen as a remedy for various educational problems, especially those related to equality and democratization of education, as well as expanding access to high-quality education to all levels of society in places and times that are not accommodated by face-to-face education. The PJJ system has become part of the formal framework through several government decisions, including Minister of National Education Decree no. 107/U/2001, National Education System Law No. 20/2003, PP 17/2010, and PP 66/2010 (Hardhono, 2012; Ossiannilsson, 2017; Sangrà, Vlachopoulos, & Cabrera, 2012).

Students must possess the skills necessary for 21st-century living to be prepared for difficulties. These abilities are known as the "4 C's", which mean "critical thinking", "collaboration", the ability to work effectively with others", communication", and "creativity". Learning is a significant problem facing society in the twenty-first century, especially in education. Learning in the twenty-first century must be able to equip students with the social skills needed to adapt to advances in information and communication technology. In order to prepare the younger generation for the advancement of communication and information technology, one critical issue related to the civic intelligence of the younger generation needs to be addressed. According to Masrukhi's research (2018), almost all seven components of civic intelligence except civic

knowledge are still low in the civic intelligence profile of schoolchildren. Civil intelligence is the capacity of an individual to take his position (Knowles, 2018; Masrukhi, 2018).

A person can increase his intelligence through the implementation of schooling. Implementation Teachers can deliver instructions in a classroom setting. Teachers have an essential role in placing education through a learning process that seeks to achieve learning objectives, in this case educating students. Practising education as one of its goals is to form civic intelligence in students. Teachers can form students' civic intelligence, part of character education.Character is not something inborn; it cannot be expected to be given by parents as the sole provider of 'good character,' nor can it be 'taught' from textbooks. The character can be formed by someone or something influenced by the amount of interaction time and the content of the interaction. The more time a child spends with someone or something, the more they will absorb and be "shaped" by that person or thing. That "something" could be a TV, video game, phone, iPad, or something else. There are many important factors involved in the development of one's character, including family, community, and school (Choi & Shin, 2017; Zubaidah, 2019).

A complete skill is needed to form citizenship intelligence, namely 21st-century skills, including critical thinking, creative thinking, collaboration or collaboration, and communication skills. The learning process for integrating 21st-century skills-based civic intelligence in distance education can be seen in the following table.

Table 4. 21st Century Skill-Based Citizenship Intelligence Development in Distance Education

No	Distance Education	21st Century Skills	Citizenship Intelligence	Character Values
1	The separation between lecturers/tutors and students.	Collaboration skills and communication skills are required	Behaviour shows a genuine effort in overcoming various learning and task barriers and completing tasks as well as possible.	Hard work, behaviour that shows genuine efforts in overcoming various learning and task barriers, and completing tasks as well as possible
2	An organized process involving educational institutions.	Collaboration skills and communication skills are required	Behaviour shows a genuine effort in overcoming various learning and task barriers and completing tasks as well as possible.	Creative, think and do something to produce new ways or results from something that you already have
3	Interaction is carried out through various learning media (print, audio, video, computer, multimedia, and web-based) to facilitate learning interactions	Collaboration skills and communication skills are required	Behaviour shows a severe effort to overcome various learning and task barriers and complete tasks as well as possible.	Creative, think and do something to produce new ways or results from something that you already have

No	Distance Education	21st Century Skills	Citizenship Intelligence	Character Values
	between lecturers/tutors and students			
4	The availability of two-way communication facilities allows students to dialogue for learning and other purposes.	Collaboration skills and communication skills are required	Behaviour shows a genuine effort in overcoming various learning and task barriers and completing tasks as well as possible.	Discipline, actions that show orderly behaviour and comply with various provisions and regulations
5	Possibility of providing opportunities to meet face-to-face for learning or social interaction.	Collaboration skills and communication skills are required	Behaviour shows a severe effort to overcome various learning and task barriers and complete tasks as well as possible.	A person's responsibility, attitude and behaviour to carry out his duties and obligations should be carried out on oneself, society, the environment (nature, social, and culture), the state, and God Almighty.
6	The educational process is like a process in the industry, i.e. there is a clear division of roles between those who carry out the management, learning, examination, and production processes of teaching materials.	The need for critical thinking skills, creative thinking, collaboration, and Communication	Behaviour shows a genuine effort in overcoming various learning and task barriers and completing tasks as well as possible.	Democratic, a way of thinking, behaving, and acting that evaluates the rights and obligations of himself and others equally

In the learning process to realize good character values by the nation's ideology, the role of distance education based on 21st-century skills requires a learning strategy that is adapted to the needs and developments of current technology. One natural way to prepare a generation of character that will bring progress and prosperity to the Indonesian nation is to instil character education values in early childhood. This will help humans return to their natural state, which is always to decorate life with good values ((Budimansyah, Hood, & Nurulpaik, 2018; Cahyaningrum, Sudayanti, & Purwanto, 2017; Mustika, 2017)

4 CONCLUSION

The progress of globalization today is a necessity that cannot be ignored. Indonesia has followed the process of globalization, thus allowing difficulties in the life of the nation and state to be associated with global concerns. It can damage national pride. All aspects of the country must take lessons from history. Must be informed about various events, including separatist movements, conflicts, ethnic groupings and SARA incidents that endanger the country's stability and bring it to its knees. There is no reason to repeat the loss of life, property and prolonged trauma.

The Indonesian nation must develop into an intelligent citizen. Intelligence Citizenship is a set of principles found in the value system of intelligence is one of the self-compassion of citizens, including beliefs and goals that individuals have or express, aspirations that are articulated, attitudes that are shown or shown, feelings and behaviours that are prioritized to be carried out, and concerns—voiced or observed.

21st-century skills in learning, especially distance learning, must be able to be carried out and developed according to the needs of the learning process so that the proclaimed skills will be achieved and can be applied in life, especially in the era of globalization by adjusting the development of technology and information that is not limited.

In the learning process to realize good character values by the nation's ideology, the role of distance education based on 21st-century skills requires a learning strategy that is adapted to the needs and developments of current technology. One natural way to prepare a generation of character that will bring progress and prosperity to the Indonesian nation is to instil character education values in early childhood. This will help humans return to their natural state, always decorating life with good values.

REFERENCES

Al Munawaroh, S. Z., & Dewi, D. A. (2021). Peran Pendidikan Kewarganegaraan di Era Revolusi Industri 4.0. *Indonesian Journal of Islamic Studies – Vol.2, No.01, (2021), pp. 47-57 PENDIDIKAN*, *2*(4), 47–57. https://doi.org/10.31004/joe.v3i4.377

Albiladi, W. S., & Alshareef, K. K. (2019). Blended Learning in English Teaching and Learning: A Review of the Current Literature. *Journal of Language Teaching and Research*, *10*(2), 232–240. https://doi.org/10.17507/jltr.1002.03

Budimansyah, D., Hood, H. S., & Nurulpaik, I. (2018). Strengthening Students' Character as Authentic Learners: Effects of Advanced School Leadership and Boost Learning. *Advances in Social Science, Education and Humanities Research, 251*(ACEC), 327–332. https://doi.org/10.2991/acec-18.2018.75

Budimansyah, D., Suharto, N., & Nurulpaik, I. (2019). *Proyek Belajar Karakter Untuk Mengembangkan Literasi Baru Abad 21*. *Gapura Press* (Cetakan pe, Vol. 1). Bandung: Gapura Press. https://doi.org/10.1017/CBO9781107415324.004

Cahyaningrum, E. S., Sudayanti, & Purwanto, N. A. (2017). Pengembangan nilai-nilai karakter anak usia dini melalui pembiasaan dan keteladanan. *Jurnal Pendidikan Anak*, *6*(2), 203–213. https://doi.org/10.26877/jo.v4i2.4005

Crick, B. (2007). Citizenship: The political and the democratic. *British Journal of Educational Studies*, *55*(3), 235–248. https://doi.org/10.1111/j.1467-8527.2007.00377.x

Darmayanti, T. (2008). Efektivitas Intervensi Keterampilan Self-Regulated Learning Dan Keteladanan Dalam Meningkatkan Kemampuan Belajar Mandiri Dan Prestasi Belajar Mahasiswa Pendidikan Jarak Jauh. *Jurnal Pendidikan Terbuka dan Jarak Jauh*, *9*(2), 68–

82. Diambil dari http://simpen.lppm.ut.ac.id/htmpublikasi/tri.pdf

Hamidi, J., & Lutfi, M. (2010). *Civic education Antara Realitas Politik dan Implementasi Hukumnya*. Jakarta: Gramedia Pustaka Utama.

Hardhono, A. P. (2012). Potensi Teknologi Komunikasi dan Informasi dalam Mendukung Penyelenggaraan Pendidikan Jarak Jauh di Indonesia. *Jurnal Potensi ICT PJJ Indonesia*, *1*, 1–11.

Hoskins, B., & Crick, R. D. (2008). Learning to learn and civic competencies: different currencies or two sides of the same coin. *Luxembourg: Office for Official Publications of the European Communities*, *45*(1). https://doi.org/10.2788/72764

Junedi, B., Mahuda, I., & Kusuma, J. W. (2020). Optimalisasi keterampilan pembelajaran abad 21 dalam proses pembelajaran pada Guru MTs Massaratul Mut'allimin Banten. *Transformasi: Jurnal Pengabdian Masyarakat*, *16*(1), 63–72. https://doi.org/10.20414/transformasi.v16i1.1963

Knowles, R. T. (2018). Teaching Whom, You Are: Connecting Teachers' Civic Education Ideology to Instructional Strategies. *Theory and Research in Social Education*, *46*(1), 68–109. https://doi.org/10.1080/00933104.2017.1356776

Kurniawan, K. I., Sriasih, S. A. P., & Nurjaya, I. G. (2017). Implementasi Program Gerakan Literasi Sekolah (Gls) Di Sma Negeri 1 Singaraja. *e-Journal JJurusan Pendidikan Bahasa dan Sastra Indonesia*, *7*(2).

Kusnadi. (2021). Pengembangan Kecerdasan Kewargaan Berbasis Literasi Humanitas : Suatu Alternatif Membangun Keadaban Publik. In *Prosiding Seminar Nasional Kewarganegaraan* (Vol. 3). Yogyakarta.

Lestari, S., & Santoso, A. (2019). The Digital Literacy, Technology Literacy, and Human Literacy Roles to Encourage Work Readiness of Accounting Education Students in the Fourth Industrial Revolution Era. *3rd ICEEBA International Conference on Economics, Education, Business and Accounting Volume 2019 Conference* (Vol. 3, hal. 513). One Social Sciences. https://doi.org/10.18502/kss.v3i11.4031

Mardhiyah, R. H., Chitta, S. N. F. A. F., & Zulfikar, M. R. (2021). Pentingnya Keterampilan Belajar di Abad 21 sebagai Tuntutan dalam Pengembangan Sumber Daya Manusia 29 Rifa. *Lectura Jurnal Pendidikn*, *12*(1), 187–193.

Masrukhi. (2018). Pengembangan Civic Intelligence Berbasis Kegiatan Ekstrakurikuler di Sekolah Dasar. *Jurnal Integralistik*, *29*(1), 14–15.

Muktaf, Z. M. (2016). T eknik Penelitian Studi Kasus , Etnografi dan Fenomenologi dalam Metode Kualitatif. *Jurnal Pendidikan*, *3*(1), 1–5.

Mustika, I. kadek. (2017). Local Wisdom-Based Character Education Teaching Balinese To Achieve National Integration Of a Nation. *SHS Web Conferences 42, 00013 (2018)*, *00013*(September 2011).

Nadzmi Akbar. (2016). Pendidikan Islam Dalam Perspektif Dakwah. *Jurnal Kajian Pendidikan Islam Mudarrisa*, *8*(2), 201–228. https://doi.org/10.18326/mudarrisa.v8i2.201-228

Osanloo, A. F. (2009). Civic responsibility and human rights education: a pan-educational alliance for social justice. *Intercultural Education*, *20*(2), 151–159.

https://doi.org/10.1080/14675980902922176

Ossiannilsson, E. (2017). *Blended Learning State of the Nation*. Oslo: International Council for Open and Distance Education - ICDE.

Rohman, B., & Jarudin. (2021). Android-Based Interactive Media For Civic Intelligence Diffusion In Al Quran Perspective. *Journal Of Southwest Jiaotong University*, *Vol 56 No*(2005), 1–21.

Sangrà, A., Vlachopoulos, D., & Cabrera, N. (2012). Building an inclusive definition of e-learning: An approach to the conceptual framework. *International Review of Research in Open and Distance Learning*, *13*(2), 145–159.

Septikasari, R. (2018). Keterampilan 4C abad 21 dalam pembelajaran. *Jurnal Tarbiyah Al-Awlad*, *VIII*(2), 112–122.

Shah, D. V., Cho, J., Nah, S., Gotlieb, M. R., Hwang, H., Lee, N. J., … Mcleod, D. M. (2007). Campaign ads, online messaging, and participation: Extending the communication mediation model. *Journal of Communication*, *57*(4), 676–703. https://doi.org/10.1111/j.1460-2466.2007.00363.x

Singh, H. (2003). Building Effective Blended Learning Programs. *Journal Educational Technology, 43*(6), 51–54.

Sugiyono. (2015). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatis, dan R&D*. Bandung: Alfabeta.

Tirtaraharja, U. (2005). *Pengantar Pendidikan*. Jakarta: Rineka Cipta.

Trisnawati, W. W., & Sari, A. K. (2019). Integrasi Keterampilan Abad 21 Dalam Modul Sociolinguistics: Keterampilan 4C (Collaboration, Communication, Critical Thinking, Dan Creativity). *Jurnal Muara Pendidikan*, *4*(2), 455–466. https://doi.org/10.52060/mp.v4i2.179

Usmi, R., & Puspitaningrum, A. (2022). Kajian pendidikan kewarganegaraan abad 21 untuk membentuk kecerdasan kewargaan yang berkeadaban publik. *Jurnal Citizenship: Media Publikasi Pendidikan Pancasila dan Kewarganegaraan*, *5*(1), 12. https://doi.org/10.12928/citizenship.v5i2.23345

Widodo, S., & Wardani, R. K. (2020). Mengajarkan Keterampilan Abad 21 4C (Communication, Collaboration, Critical Thinking And Problem Solving, Creativity And Innovation) Di Sekolah Dasar. *MODELING: Jurnal Program Studi PGMI*, *7*(2), 185–197. Diambil dari https://www.researchgate.net/publication/348742516

Wijaya, E. Y., Sudjimat, D. A., & Nyoto, A. (2016). Transformasi Pendidikan Abad 21 Sebagai Tuntutan Pengembangan Sumber Daya Manusia Di Era Global. *Jurnal pendidikan*, *1*, 263–278.

Winataputra, U. S. (2001). *Jatidiri Pendidikan Kewarganegaraan Sebagai Wahana Sistemik Pendidikan Demokrasi (Suatu Kajian Konseptual Dalam Konteks Pendidikan IPS)*. Universitas Pendidikan Indonesia, Bandung.

Zubaidah, S. (2016). Keterampilan Abad Ke-21: Keterampilan Yang Diajarkan Melalui Pembelajaran. In *Seminar nasional Pendidikan dengan Tema "isu-Isu Strategis Pembelajaran IPA Abad 21" 10 Desember 2016* (hal. 1–18). Sintang, Kalimantan Barat:

Prodi pendidikan Biologi STKIP Persada Khatulistiwa.

Zubaidah, S. (2019). Pendidikan Karakter Terintegrasi Keterampilan Abad Ke-21. *Jurnal Penelitian dan Pengkajian Ilmu Pendidikan: e-Saintika*, *3*(2), 1. https://doi.org/10.36312/e-saintika.v3i2.125