CHALLENGES AND OPPORTUNITIES OF DIGITAL EDUCATION AND HUMANISM AMONG GENERATION Z

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ABSTRACT

The adoption of digital education in several institutions has quickened due to the swift advancement of information and communication technologies. Government initiatives like Merdeka Belajar and a variety of educational platforms, online and hybrid learning methods are growing in popularity. While digital education enables larger accessibility, questions arise regarding the erosion of humanistic values in the educational process. A teacher-student relationship that is weakened by technology use may have a detrimental impact on humanistic elements including empathy, communication, and character development. This study employs a qualitative descriptive method through a literature review. A thorough synthesis of the problem was compiled using a variety of sources, including books, reports, and journals. By analysing the chosen literature critically, the study upholds its validity. The findings suggest that although digital education offers increased flexibility and accessibility, there are noteworthy obstacles associated with a "humanism crisis." The limited human interaction in online learning may damage students' social and emotional development. This article suggests creating curricula that combine digital technology and humanistic principles, as well as creating learning environments that encourage individual and group communication. Digital education can advance further without compromising the fundamental humanistic principles of education provided the appropriate strategy is adopted. Despite the advent of a multitude of digital distractions, Generation Z, being digital natives, may adjust to digital education through the use of diverse technology.

Keywords: digital education, humanism, generation z

1. PREFACE

The advancement of information and communication technology in the age of globalization has had a profound effect on many facets of society, including education. The idea of digital education is becoming more and more relevant as a result of the ongoing technological revolution brought about by advancements in computer and smartphone hardware, instructional software, and the internet. The term "digital education" refers to a variety of initiatives that use technology to enhance online and blended learning.

Based on an internal survey by Zenius Education on 199 students using the Zenius Live Teaching feature, it was found that around 80.91 percent of users felt that the online class feature was successful in helping them understand the lessons (Kasih, 2020). There are various online learning platforms such as Google Classroom, Zoom, and local platforms like Ruangguru, Rumah Belajar, Belajar.id, Televisi Edukasi, and many more. In addition, government programs like "*Merdeka Belajar*" and "*Guru Penggerak*" encourage the improvement of digital competencies among educators, helping them to be more prepared in integrating technology into the learning process. Additionally, online courses such as Coursera, RevoU, and many others contribute to this effort.

Figure 1
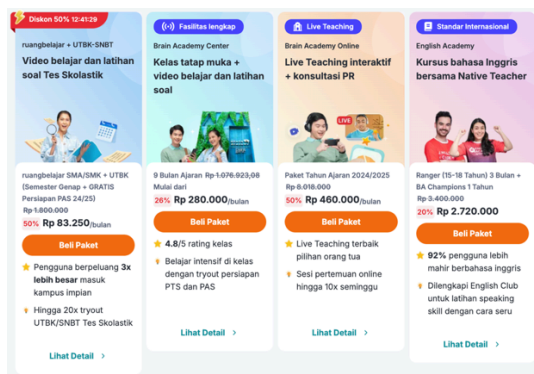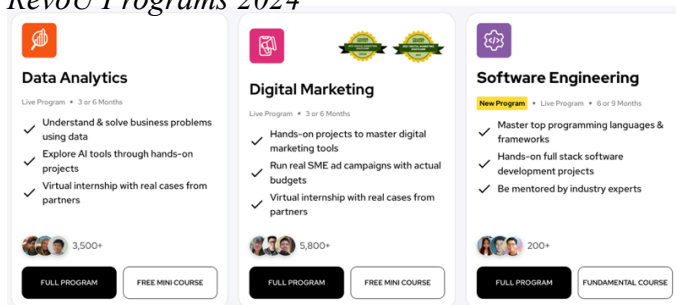*Ruangguru Learning Package 2024*

Figure 2
RevoU Programs 2024

In educational literature, the term "digital education" refers to the use of information and communication technology in the learning process. According to Selwyn (2017), digital education is not just about using technology to deliver content but also about how technology transforms the way we learn, think, and interact. Kopp et al. (2019) highlights that digital education can overcome geographical and temporal limitations, allowing students to learn anytime and anywhere. However, a significant challenge lies in maintaining humanistic values in the process. The learning process is part of the development of humanitarian or emotional values, communication, openness, and the values held by each student (Wardhana et al., 2020).

Digital education not only serves as a solution to physical and geographical constraints but also presents an opportunity to create more flexible and interactive learning models. However, alongside the opportunities it offers, concerns arise about the impact of digitalization on the human aspect of education, known as the "humanism crisis." Education, at its core, is not just the transmission of knowledge but also a process of shaping character and human values. Yet, the widespread adoption of technology in education carries the risk of a humanism crisis, with concerns that education may lose its essential humanistic aspect—namely, human interaction, empathy, and understanding between individuals.

Humanism in education refers to an approach that emphasizes human values such as Humanism in education refers to an approach that emphasizes human values such as empathy, justice, honesty, and respect for human dignity. According to Noddings, humanistic education focuses on developing students as whole individuals, with attention to their emotional, moral, and intellectual well-being (Lees & Noddings, 2016). Humanism in education stresses the importance of interpersonal relationships between teachers and students, as well as creating a

learning environment that supports the holistic development of individuals. This humanistic approach considers education not only as an academic knowledge transfer but also as involving the moral, social, and emotional development of learners (Nasution, 2020).

The exponential growth of information and communication technology in the age of interconnected societies has had a profound effect on many facets of society, including education. The idea of digital education is becoming more and more relevant as a result of the ongoing technological revolution brought about by breakthroughs in computer and smartphone hardware, instructional software, and the internet. The term "digital education" refers to a variety of initiatives that use technology to enhance blended and online educational experiences.

Generation Z, which describes those who were born between 1995 and 2010, shares several similarities with millennials, yet their formative years were influenced by a distinct social and cultural landscape, resulting in significant differences in their beliefs, preferences, values, and perspectives (Seemiller & Grace, 2016). This generation has encountered numerous factors that contribute to the rise of mental health challenges (Casey, 2024). Moreover, many individuals within this cohort are susceptible to the "compare and despair" phenomenon exacerbated by social media platforms (Tagare & Villaluz, 2021).

Consequently, the purpose of the following paper is to examine the potential and problems that digital education presents for humanism, particularly with respect to Indonesia's Generation Z. It also describes the evolution of digital education in Indonesia and the potential adverse consequences from the digitalization of education related to the humanism challenge. It is believed that this study will help find options to integrate digital technology into education while preserving values associated with humanity.

2. RESEARCH METHOD

In this study, the method employed is a descriptive qualitative approach using a literature review technique. This method was chosen with the aim of thoroughly examining concepts, theories, and previous research findings relevant to the themes of digital education and humanism. The qualitative literature review approach allows researchers to analyse various perspectives, data, and findings from existing studies, thereby constructing a comprehensive and critical synthesis of the topic under investigation.

According to Snyder (2019), a literature review is a method that enables researchers to systematically identify, evaluate, and compile existing knowledge within a particular field of study. This method is particularly suitable for research aimed at exploring theoretical and empirical concepts that have been previously published. Data collection in a literature review is conducted by identifying and selecting relevant literature sources from academic journals, books, reports, and other articles related to digital education and humanism.

By using the literature review method, this study seeks to gain a comprehensive understanding of how digital education has developed and the challenges faced in maintaining humanistic values in the digital era. This technique provides flexibility in deeply exploring the topic based on diverse literature, which may not be possible through a single empirical study.

To ensure the validity and reliability of the literature review research, it is important to apply systematic procedures in the collection and analysis of data. As stated by Torraco (2016), validity in a literature review can be achieved through an extensive and focused literature search

on a specific topic, as well as by evaluating the quality of each selected source. Additionally, researchers must consider different perspectives in each piece of literature so that the research findings reflect a comprehensive representation of the topic being discussed.

Thus, the use of the literature review method in this research is expected to produce a thorough and in-depth perspective on the issues of digital education and the humanism crisis, while also providing relevant recommendations for the development of education in the digital era.

3. RESULT AND DISCUSSION
The Development of Digital Education in Indonesia
Digital education in Indonesia has experienced significant acceleration, particularly since the onset of the COVID-19 pandemic in 2020. The government, educational institutions, and students were forced to adapt to online learning models due to social restrictions implemented to mitigate the spread of the virus. The pandemic has posed significant challenges to the development of digital-based curricula (Crawford et al., 2020). Approximately 1.5 billion students worldwide had to adapt to online learning models (Arianto, 2022). All educational stakeholders, including teachers, lecturers, students, and parents, underwent adaptations and shifted their strategies from traditional face-to-face learning to virtual or remote learning methods (Hollweck & Doucet, 2020).

However, adapting to digital education in Indonesia has not been without challenges. Various obstacles have emerged, ranging from the availability of technological infrastructure to digital literacy among teachers and students. A survey conducted by the Ministry of Education and Culture revealed that approximately 40% of students in Indonesia still have limited access to the internet, particularly in rural and remote areas (Putra, 2022). Moreover, the ability of teachers to utilize online learning technology remains varied. A research from Pedagogy indicated that while most teachers in urban areas have good access to technology, many still lack the competence to effectively integrate technology into the learning process (Tyarakanita et al., 2021).

Educational technology platforms such as Ruangguru, Zenius, and Quipper have contributed to the digitalization of education by providing easily accessible digital learning content for students across Indonesia. Additionally, the development of digital education in Indonesia has also been driven by various initiatives from both the government and the private sector. Through the "Merdeka Belajar" program launched in 2020, the government has encouraged the use of technology in the learning process to create a more adaptive and flexible educational model. In addition, the Ministry of Education and Culture offers students access to Rumah Belajar, a digital learning platform that allows them to study a variety of topics online. There are a total of 3.797 learning items available on Rumah Belajar. As of October 4, 2024, it has 235.078 downloads and 446.453 visitors across all content (Kemdikbud, 2024).

Figure 3
Merdeka Belajar Kampus Merdeka

The Challenges of Humanism in Digital Education

With the rapid development of digital education, concerns have arisen regarding the impact of technology on humanistic values in education. According to Turkle (2016), interactions within digital spaces often overlook humanistic aspects such as empathy, attention, and emotional engagement. Digital education tends to prioritize efficiency and outcomes, sometimes neglecting the learning process as a means to shape students' character and morals.

Previously, Jacobus and Geor (2024) researched the concept of humanistic education and its implementation in character education. They found that character education and humanism are closely related, as humanistic character education emphasizes the development of positive and humanistic character traits. The goal of humanistic character education is to foster harmonious, happy, and balanced character development. It also cultivates independent, empathetic, creative, and tolerant individuals (Jacobus & Geor, 2024).

Mariani et al. (2024) also explored the philosophy of humanism in the context of learning and the concept of "*Merdeka Belajar*." They found that humanistic educational philosophy emphasizes the process of humanizing individuals through education. In practice, humanistic philosophy encourages students to think critically, value experience, and actively engage in the learning process. The "Merdeka Belajar" concept provides students with the freedom and comfort to learn. The significance of humanism in learning is evident in the various components involved, including teachers, educational goals, students, materials, methods, facilities, infrastructure, and evaluation (Mariani et al., 2024).

The decrease in face-to-face encounters between students and teachers, which have long been seen to be crucial in forming social and emotional values, is one way that the humanism issue in education is manifested. Technology-driven online learning frequently reduces the interpersonal component of relationships, which may have an impact on the standard of instruction. Moreover, digital education is susceptible to the commoditization of education, which reduces education to

a product that can be accessed anywhere, at any time, and frequently ignores personalization and interpersonal connection. In this environment, education runs the risk of losing its humanistic core, where students are seen more as customers who need to reach predetermined goals rather than as unique individuals with special needs.

However, this does not mean that digital education cannot support humanism. With the right approach, digital technology can be used to reinforce humanistic values in education. For instance, digital learning platforms can be designed to support more personalized interaction between teachers and students and to provide opportunities for students to develop their social and emotional skills through collaborative online projects. A more approachable teaching style with humor (Huss, 2022), interactive discussion (Grace et al., 2020), peer-to-peer study (Malat, 2016), and online quiz assignment (Panopto, 2019), are also considered important for structuring today's online learning experience that fosters humanism virtues.

Opportunities and Obstacles in Digital Education for Generation Z
Generation Z in Indonesia, having been exposed to digital devices from an early age, generally shows a high level of adaptability to technology in education. The majority of Generation Z uses smartphones to access information and engage in learning processes (McKinsey & Company, 2020). They tend to prefer interactive and self-directed learning methods, which allow them to learn at their own pace and according to their preferences. Online learning offers the flexibility of time and location that is not available in traditional educational models. However, behind their high adaptability, Generation Z also faces several challenges in digital education. Digital distractions, such as social media notifications, often disrupt their concentration during online learning sessions (Koessmeier & Büttner, 2021). Additionally, the lack of face-to-face interaction in online learning may impact the social and emotional development of students.

Although Generation Z in Indonesia possesses high technological skills, digital education presents specific challenges, particularly in the social, emotional, and infrastructural contexts of education in Indonesia. First, there is a disparity in access to technology. While Generation Z is generally tech-savvy, not all students in Indonesia have equal access to devices and adequate internet connectivity. A study by the Indonesian Internet Service Providers Association found that about 26.3% of Indonesia's population still lacks internet access, particularly in remote areas (Karnadi, 2022). This creates a digital divide, where students in urban areas are more fortunate compared to those in rural regions in accessing digital education.

Moreover, the crisis of concentration and engagement persists. While Generation Z is more adaptive to technology, they are also more susceptible to digital distractions. The influx of information from the internet and social media often makes it difficult for them to focus for extended periods. In the Journal of Cognitive Human-Computer Interaction found that Generation Z as a student tends to get distracted easily, difficult to maintain focus during classes, moreover there is a speedy flow of information around their lives (Sumithra et al., 2022).

The lack of social interaction in digital education, especially in remote learning formats, reduces opportunities for Generation Z to engage directly with classmates and teachers, which can impact their social and emotional development. Despite these challenges, digital education also offers numerous opportunities for Generation Z in Indonesia, especially in terms of flexibility and access to global resources. Digital education enables Generation Z to learn anytime and anywhere, which is a significant advantage for students with mobility or time constraints. They can access learning materials, instructional videos, and online discussions without needing to be

physically present in the classroom. This creates opportunities to reach more students across Indonesia, including those in difficult-to-access areas.

Benefiting from the use of technology and its convenience, digital learning has been proven to increase the motivation and interest of Gen Z learners in understanding the course which has an impact on students' academic progress (Yalçın İncik, 2022). Digital education also helps prepare Generation Z to face the challenges and opportunities of the digital economy era. They are trained to use relevant software, applications, and platforms for the modern workforce, such as data processing programs, graphic design tools, and coding skills. As such, Generation Z gains a competitive edge in a job market increasingly driven by digital technology. The growing trend of jobs shifting towards the digital realm presents an advantage for the younger generation. This includes roles such as content creators, social media specialists, and other professions closely related to artificial intelligence.

Furthermore, Gen Z is also a sustainability generation. Continuous exposure to the environment, society, economy, and cultural issues pioneered on social media is shaping Gen Z to become more aware and motivated to implement sustainable behaviors (Deloitte, 2023). In the recent presidential election in Indonesia, a survey conducted by WWF Indonesia (2024) revealed that 97% of the younger generation took into account candidates' environmental mission as a foundation to vote. The research found that there is a positive signal in Generation Z's intention towards energy transition matters in Indonesia (Wijaya & Kokchang, 2023). Further digital education tailored to the right tutors and online teaching systems will equip Generation Z to apply such knowledge to solve complex world problems in the future.

4.   CONCLUSIONS AND RECOMMENDATIONS

The development of digital education in Indonesia has shown great potential for improving access to and the quality of education. However, alongside these advancements, serious challenges related to the crisis of humanism have emerged due to reduced direct interactions between teachers and students and the diminished personal dimension of the learning process.

To address these challenges, it is crucial for education stakeholders to fully understand that Generation Z learners have unique characteristics - technology savvy, pragmatic, and choose to quickly access information rather than extensively acquiring the knowledge at a deeper level.

Ultimately, a reformed digital learning method is paramount. A teacher should design digital learning models that not only emphasize efficiency but also consider humanistic aspects. Some recommended steps include humanistic curriculum design and the use of technology to support personal interaction. Digital education curricula should be designed to focus on the development of students' social and emotional values, such as incorporating collaborative projects that require student cooperation. Digital learning platforms can be designed to enable more profound interactions between teachers and students, such as through video call features that facilitate private discussions or mentoring. By doing so, digital education can continue to evolve without sacrificing the essential humanistic aspects that are critical for the holistic development of students as complete individuals.

REFERENCES

Arianto, B. (2022). Pedagogi Digital dalam Pendidikan Indonesia di Masa Pandemi Covid-19. *Jurnal Cerdik: Jurnal Pendidikan Dan Pengajaran*, *2*(1), 106–123. https://doi.org/10.21776/ub.jcerdik.2022.002.01.09

Casey, A. (2024, January 16). *What are the core characteristics of generation z?* The Annie E. Casey Foundation.

Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P. A., & Lam, S. (2020). Covid-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning and Teaching*, *3*(1). https://doi.org/10.37074/jalt.2020.3.1.7

Deloitte. (2023, October 31). *The sustainable consumer 2023*. Deloitte.

Grace, M., Campagnolo, P. D. B., Alves, I. M. D. R., De Borba, G. S., & Seemiller, C. (2020). What makes learning enjoyable Perspectives of today s college students in the U.S. and Brazil. *Journal of Pedagogical Research*, *5*(1), 1–17. https://doi.org/10.33902/JPR.2020065267

Hollweck, T., & Doucet, A. (2020). Pracademics in the pandemic: pedagogies and professionalism. *Journal of Professional Capital and Community*, *5*(3–4). https://doi.org/10.1108/JPCC-06-2020-0038

Huss, J. (2022). *Chuckling all the way to the computer: Connecting with your online students through humor. In K. Vaidya (Ed.), Teach Education Studies with a Sense of Humor: Why (and How to) Be a More Effective Education Studies Teacher and Laugh All the Way to Your Classroom*.

Jacobus, S., & Geor, G. (2024). Konsep pendidikan humanisme dan implementasinya terhadap pendidikan karakter di sekolah dasar. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, *7*(2), 1195–1201. https://doi.org/10.54371/jiip.v7i2.3832

Karnadi, A. (2022, February 22). *Penduduk di 8 Negara Ini Banyak yang Belum Terkoneksi Internet*. DataIndonesia.id. https://dataindonesia.id/internet/detail/penduduk-di-8-negara-ini-banyak-yang-belum-terkon eksi-internet

Kasih, A. P. (2020, April 1). *Survei: 81 Persen Pengguna Kelas "Online" Terbantu Memahami Pelajaran*. Kompas.com. https://edukasi.kompas.com/read/2020/04/01/152512671/survei-81-persen-pengguna-kelas-online-terbantu-memahami-pelajaran

Kemdikbud. (2024). *Rumah belajar "Belajar untuk semua."* Rumah Belajar. https://belajar.kemdikbud.go.id/.

Koessmeier, C., & Büttner, O. B. (2021). Why are we distracted by social media? distraction situations and strategies, reasons for distraction, and individual differences. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.711416

Kopp, M., Gröblinger, O., & Adams, S. (2019). Five Common assumptions that prevent digital transformation at higher education institutions. *13th International Technology, Education and Development Conference*, 1448–1457.

Lees, H. E., & Noddings, N. (2016). *The Palgrave international handbook of alternative education*. Palgrave Macmillan.

Malat, L. (2016, January 7). *Gen Z is about to take over higher education: Here's what to expect*. ECampus News.

Mariani, Zainal Rafli, & Ifan Iskandar. (2024). Filsafat humanisme dalam perspektif pembelajaran bahasa terhadap konsep merdeka belajar: Kajian teori. *Journal of International Multidisciplinary Research*, *2*(5), 196–204. https://doi.org/10.62504/jimr462

Nasution, A. G. J. (2020). Diskursus merdeka belajar perspektif pendidikan humanisme. *Jurnal Pendidikan Bahasa dan Sastra UIN Sumatera Utara Medan Al Arabiyah*, *6*(1), 107-121.

Panopto. (2019, May 20). *May 20). How to create micro-learning videos for employee training and development.* Panopto.com. https://www.panopto.com/blog/how-to-create-microlearning-videos/.

Putra, P. I. (2022, May 6). *40% Sekolah di Indonesia Belum Terjangkau Akses Internet.* Medcom.id. https://www.medcom.id/pendidikan/news-pendidikan/gNQeWJVN-40-sekolah-di-indonesia -belum-terjangkau-akses-internet.

Seemiller, C., & Grace, M. (2016). *Generation z goes to college*. John Wiley & Sons.

Selwyn, N. (2017). Education & technology. Key issues & debates. In *Neurological sciences : official journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology*. Bloomsbury Publishing. https://doi.org/3636620

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, *104*. https://doi.org/10.1016/j.jbusres.2019.07.039

Sumithra, M., Buvaneswari, B., Judith, S., Dymphna, M. C., Punintha, R., & Pavithraa, S. (2022). Innovation for Better Education System using Artificial Intelligence. *Journal of Cognitive Human-Computer Interaction*, *2*(1), 19–28.

Tagare, R. J. L., & Villaluz, G. D. C. (2021). Activity preferences of generation z students for tertiary physical education: implications for curriculum enhancement. *Multidisciplinary Journal for Education, Social and Technological Sciences*, *8*(2), 92. https://doi.org/10.4995/muse.2021.15492

Torraco, R. J. (2016). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, *4*(15). https://doi.org/10.1177/1534484305278283

Turkle, S. (2016). Reclaiming conversation. *Camping Magazine*, *89*(2).

Tyarakanita, A., Nurkamto, J., & Drajati, N. A. (2021). The Indonesian EFL teachers' TPACK development in the online community of practice. *Pedagogy : Journal of English Language Teaching*, *9*(2). https://doi.org/10.32332/joelt.v9i2.3229

Wardhana, I. P., S, L. A., & Pratiwi, V. U. (2020). Konsep pendidikan taman siswa sebagai dasar kebijakan pendidikan nasional merdeka belajar di Indonesia. *Prosiding Seminar Nasional*, *4*(1).

Wijaya, D. I., & Kokchang, P. (2023). Factors influencing generation z's pro-environmental behavior towards indonesia's energy transition. *Sustainability*, *15*(18), 13485. https://doi.org/10.3390/su151813485

WWF Indonesia. (2024, January 19). *Environmental preservation is an important consideration for millennials and gen z to make presidential choices in 2024 elections*. WWF Indonesia. http://www.wwf.id/en/blog/environmental-preservation-important-consideration-millennials -and-gen-z-make-presidential.

Yalçin-Incik, E., & Incik, T. (2022). Generation Z Students' Views on Technology in Education: What They Want What They Get. *Malaysian Online Journal of Educational Technology*, *10*(2), 109-124. https://doi.org/10.52380/mojet.2022.10.2.275