

BALANCING TECHNOLOGY AND HUMAN VALUES: A LITERATURE REVIEW ON THE TRANSFORMATION OF TEACHERS' ROLES IN SHAPING A GENERATION WITH CHARACTER AND EMPATHY IN THE ERA OF SOCIETY 5.0

Syamsu Qamar Badu

Matematika Fakultas Matematika dan Ilmu pengetahuan alam FMIPA
Universitas Negeri Gorontalo
sqb.tuta@gmail.com

Novianty Djafri

Manajemen Pendidikan Fakultas Ilmu Pendidikan Universitas Negeri Gorontalo
noviantydjafri@ung.ac.id

Heldy Alam

Fakultas Ekonomi Dan Bisnis Universitas Negeri Gorontalo
heldy.alam@ung.ac.id

Abstract

The development of technology in the era of Society 5.0 has brought significant changes in the world of education, demanding the transformation of the role of teachers from mere conveyors of knowledge to facilitators, models, and inspirers of character. This research aims to review the literature related to efforts to balance the use of technology with the cultivation of human values, especially character and empathy, in the education process. Through a qualitative literature study, it was found that teachers have a central role in guiding students to be not only digitally proficient, but also emotionally and socially mature. Effective strategies include integrating character values into technology-based learning, strengthening digital literacy and ethics, and collaboration between school, family and community. The results of the study confirm that technology should be positioned as a tool to strengthen character learning, not replace it, so that education in the era of Society 5.0 can produce a generation with character, empathy and readiness to face global challenges.

Keywords: Society 5.0, role of teachers, character education, empathy, educational technology, human values

Introduction

The development of science and technology today has brought major changes in various aspects of human life. One of the most significant changes has been the emergence of the Society 5.0 era, a concept of a human-centred society based on advanced technology. This concept was first introduced by the Japanese government in response to the challenges and limitations faced in the era of Industrial Revolution 4.0 (Judijanto & Aslan, 2025); (Purike & Aslan, 2025).

Society 5.0 places humans at the centre of innovation with the main goal of creating new value that can overcome social inequalities and improve the overall quality of life of society. Technologies such as artificial intelligence (AI), Internet of Things (IoT),

and big data are used not only for economic efficiency, but also for social welfare and environmental sustainability (Jumiatmoko; Muthmainah; Aprinalistria ., 2024)

Digital transformation in the Society 5.0 era has penetrated into various fields, including education. Education is expected to be able to prepare human resources who not only excel in technological literacy, but also have character, empathy, and the ability to think critically, creatively, and collaboratively (Alkhalaf, 2024) .

The role of teachers in education has fundamentally shifted. Previously, teachers acted more as the main source of knowledge, but now teachers are required to be facilitators, motivators, and models in shaping students' character and empathy. Teachers must be able to utilise technology as a learning tool without ignoring human values (Astuti et al., 2023) . The main challenge in the era of Society 5.0 is how to balance the utilisation of technology and the cultivation of character values. Unwise use of technology can lead to the risk of dehumanisation, decreased social interaction, and reduced empathy and care between individuals (Setiawan, 2024) .

Character education and empathy are becoming increasingly important in shaping a generation that is ready to face global challenges. Values such as honesty, responsibility, tolerance, and mutual cooperation must still be instilled through the education process, even though technology increasingly dominates daily life (Putra & Aslan, 2019) .

The implementation of the Merdeka Curriculum in Indonesia is an effort to adapt to the demands of the Society 5.0 era. This curriculum emphasises flexibility, project-based learning, and character development, so that teachers have more freedom in choosing teaching methods and tools that suit student needs (Aslan & Wahyudin, 2020) . Technology in education can be a very effective tool to improve the quality of learning if used wisely. Teachers can utilise digital platforms, online learning resources and learning applications to create a more adaptive, personalised and enjoyable learning experience (Firmansyah & Aslan, 2025a) ; (Firmansyah & Aslan, 2025b) .

However, the use of technology also presents new challenges for teachers. They must have adequate digital competence, be able to sort out relevant information, and integrate character values in every learning activity, both online and offline.

The transformation of teachers' roles in the Society 5.0 era demands continuous professional development. Teachers need to continue to learn and adapt to technological developments, while strengthening their capacity to guide students to maintain character and empathy in the midst of digitalisation (Hidayat, 2024) .

Literature shows that education that balances technology and human values can produce a generation that is not only intellectually intelligent, but also emotionally and socially mature. This is very important to build a harmonious, inclusive, and highly competitive society in the future (Kurniawan, 2024) .

This research aims to examine in depth the transformation of the role of teachers in shaping a generation with character and empathy in the era of Society 5.0 through a

literature review. Thus, it is hoped that effective strategies can be found in balancing the utilisation of technology and the cultivation of human values in Indonesian education today and in the future.

Research Methods

The research method used in this study is qualitative research with a library research approach. Data were collected by reviewing and analysing various relevant literature sources, such as scientific journals, books, and articles that discuss the role of teachers, character education, empathy, and technology integration in the Society 5.0 era. Data analysis was carried out descriptively and thematically to identify patterns, challenges, and strategies used by teachers in balancing the use of technology and the cultivation of human values in education (Eliyah & Aslan, 2025) ; (Cronin et al., 2008) .

Results and Discussion

Transformation of the Teacher's Role in Shaping Students' Character and Empathy in the Era of Society 5.0

The Society 5.0 era marks a major change in the world of education, where advanced technologies such as artificial intelligence, the Internet of Things, and big data are integrated to create a human-centred society. In this context, the role of the teacher is no longer simply as a conveyor of knowledge, but as an agent of change who guides students to face new challenges and opportunities that arise due to technological advances (Ramadhani, 2024) .

The transformation of the role of teachers is very much felt in the formation of students' character and empathy. Teachers are now required to not only teach academic knowledge, but also instil moral values, ethics, and empathy which are important foundations in building a generation with integrity and care for others (Saputra et al., 2024) ; (Cahyono & Aslan, 2025) .

Teachers as learning facilitators are key in this era. They must be able to create a learning environment that is inclusive, interactive and supportive of students' character development. Teachers are also expected to utilise technology wisely to enrich learning methods without ignoring human values. The importance of digital literacy and human literacy is a challenge for teachers. In addition to mastering technology, teachers must also equip students with the ability to think critically, creatively, collaboratively, and empathetically so that they can adapt and contribute positively in a digital society (Aslan & Rasmita, 2025) ; (Ridwan et al., 2024) .

The strategy to build students' character and empathy involves various approaches, such as modelling, habituation, group discussions, role playing, and social activities. Teachers model good behaviour, showing empathy, honesty and responsibility in every interaction with students. The role playing method has proven effective in fostering students' empathy. Through role simulation, students are invited

to understand the feelings and perspectives of others, so as to develop social-emotional skills that are important for social life (Chandra, 2023) .

Teachers also act as mediators and facilitators in building effective communication between students, parents and the neighbourhood. By creating a positive and supportive classroom atmosphere, teachers help students feel valued, heard and accepted, ultimately strengthening their character and empathy. The use of technology in character learning should be done wisely. Teachers need to guide students in sorting out information, avoiding negative content, and utilising digital platforms for discussions and collaborations that build positive values (Dolores Villena-Martínez; David Molina-Muñoz; Lorena Linares-Baez; Antonio Burgos-García, 2024) .

The main challenge facing teachers in the era of Society 5.0 is to maintain a balance between the utilisation of technology and the cultivation of human values. Teachers must be able to anticipate the risk of dehumanisation, decreased social interaction, and reduced empathy due to excessive use of technology. Teacher professional development is very important (Wibowo, 2025) . Teachers need to keep learning, adapting to technological developments, and developing new competencies to remain relevant and able to optimally guide students in the digital era. Collaboration between teachers, parents and the community is a supporting factor in the formation of students' character and empathy. This synergy ensures that the values taught at school are also applied in the family environment and the wider community (Norhanida Samsudin; Mohd Asri Mohd Noor, 2025) .

Regular evaluation and reflection are conducted by teachers to monitor students' character development and empathy. Through observation, assessment, and communication with parents, teachers can adjust learning strategies to be more effective and in accordance with student needs (Fadilah, 2024) .

Teachers as inspirers and motivators play a role in arousing students' enthusiasm for learning, curiosity and social awareness. By providing inspiration and motivation, teachers help students find meaning and purpose in life that is broader than just academic achievement (Rahmawati, 2024) .

Thus, the transformation of the role of teachers in the Society 5.0 era is crucial in shaping a generation that is not only intellectually intelligent, but also emotionally and socially mature. Teachers remain the main actors who are irreplaceable by technology in building students' character and empathy, so as to create a harmonious, inclusive and highly competitive society in the future.

Challenges and Strategies in Balancing Technology with Human Values in Education

The development of digital technology has brought great changes in the world of education, from wider access to information to more innovative learning methods. However, these advancements also present serious challenges in keeping human values

at the core of the education process. One of the main challenges is the gap in access to technology. Not all students and teachers have equal access to adequate devices and internet networks, especially in remote areas. This has the potential to widen the education gap and hinder equitable distribution of learning quality (Maulana, 2024) .

Over-reliance on technology can reduce social interaction. Too much online learning can reduce students' opportunities for face-to-face interaction, which can reduce their communication, empathy and cooperation skills. The risk of dehumanisation and declining character values is also a concern. Technology, if not used wisely, can make students more individualistic, less concerned about the surrounding environment, and easily exposed to negative content such as hoaxes or cyberbullying (Renyaan et al., 2025) ; (Suryadi & Aslan, 2025) ; (Rahayu et al., 2025) .

The crisis of role models in digital media is a challenge. Public figures on social media often do not show exemplary behaviour, so students need guidance to sort out what is exemplary. The lack of digital supervision makes students vulnerable to negative cyber influences. Teachers and parents often struggle to effectively monitor students' online activities, so closer collaboration between schools and families is needed. The challenges in instilling character values and empathy in the Society 5.0 era are increasingly complex. Students must be equipped with digital literacy, critical thinking skills, and ethical awareness to be able to deal with the rapid and diverse flow of information (Ruixia Sun; Jingyu Li, 2024) .

The first strategy is the integration of character values into the digital curriculum. Values such as honesty, responsibility and empathy should be taught through various technology-based subjects and activities, such as inspirational videos, simulations and moral-based educational games. Strengthening the role of teachers as digital role models is crucial. Teachers should set an example in the wise use of technology, teach the ethics of interacting online, and guide students to avoid negative content and unethical behaviour. Collaboration between schools, parents and communities is key to the success of character education in the digital era. Parents need to be actively involved in monitoring and fostering children's character, both at home and in the digital environment (Sun, 2024) .

Utilising technology for activities that encourage social interaction and empathy can be done through collaborative projects, VR-based simulations, or online social activities that train students to work together and understand others' perspectives. The implementation of digital literacy and digital ethics should be an integral part of education. Students need to be taught how to sort information, avoid hoaxes, and understand the social and ethical impacts of using technology (Anita Candra Dewi; Putri Fatimah Az-Zahra; Nirwana; Nur Ilmi; Nurtin Dwi Putri; Pety Desvita Sari, 2023) . Continuous evaluation and reflection are needed to monitor the impact of technology use on students' character development. Teachers and schools should regularly assess

the effectiveness of the strategies implemented and make adjustments if necessary (Faya Izma Alayda; Putu Sudira; Farid Mutohhari ., 2022)

Thus, balancing technology with human values in education requires a holistic and collaborative approach. Technology should be positioned as a tool to strengthen character learning, not replace it. With the right strategy, education in the era of Society 5.0 can produce a generation that is not only intellectually smart, but also emotionally and socially mature.

Conclusion

The transformation of the role of teachers in the Society 5.0 era requires teachers to not only master technology, but also become agents of character building and empathy for students. Teachers act as humanitarian facilitators who are able to integrate moral, ethical and empathetic values into the technology-based learning process. Thus, education does not only focus on mastering digital knowledge and skills, but also on strengthening character and human values that are essential for future generations.

Balancing technology and human values in education requires a holistic and collaborative strategy. Teachers must be role models in the wise use of technology, teach digital ethics, and guide students to maintain social interaction and empathy in the midst of digitalisation. Collaboration between schools, families and communities is essential to ensure that character values remain at the core of education, despite the rapid development of technology.

Ultimately, the utilisation of technology in education should be positioned as a tool to strengthen character learning, not replace it. With the right approach, education in the era of Society 5.0 can produce a generation that is not only intellectually intelligent, but also emotionally and socially mature, so as to be able to face global challenges with high integrity and empathy.

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