Socio-Cultural Changes in Modernization and Technology Viewed From The Learning Process

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Abstract

The development of information and communication technology in modernization has revolutionized learning and access to information. This study aims to describe the socio-cultural changes in educational institutions and how to implement the learning process in digital literacy. This study uses a qualitative approach using literature reviews such as academic articles, research papers, and books that explore the relationship between modernization, technology, and socio-cultural change, emphasizing the role of the learning process. The results show that there are socio-cultural changes in the scope of educational institutions amid technological modernization. Technological developments affect learning methods in an educational institution. Technology is also changing how teachers and students seek learning resources. Technology also creates how distance learning can be done using video conferencing platforms. The impact of technology and modernization has changed the way students interact and communicate in the school environment. Educational institutions also try to adapt the curriculum to the needs of modern society. The digital literacy-based learning process also has an impact when the vast internet technology and information technology global knowledge have become more accessible through local or national and international dimensions. The role of social media and other digital platforms in the learning process influences how people create and maintain their digital identities.

Keywords: Learning Process, Socio-Cultural, Technology

I. INTRODUCTION

The rapid advancement of modernization and technology has brought significant changes in various aspects of people's lives, especially in cultural and social dynamics. Modernization can also be interpreted as a change in society, moving from traditional conditions or pre-modern society to modern society [1]. Modernization, a transformation process towards a more advanced and sophisticated life pattern, has significantly impacted various aspects of people's lives, including the education system. There are three important issues to reconsider related to modernizing education: (1) how people learn, (2) what people learn, and (3) where & when people learn [2]. On the other hand, the development of information and communication technology has revolutionized learning and access to information.

In today's globalization and technological advancement era, learning is no longer limited to the scope of schools or formal educational institutions. Technology has opened up access to unlimited learning resources through the internet and digital media, allowing individuals to learn independently, and information can quickly spread across the globe. The internet has advantages as a learning resource that can be applied in learning activities or teaching and learning by functioning as a learning resource, including the internet as a source of information that supports learning activities[3]. The widespread availability of digital resources, such as the internet, e-learning platforms, and mobile apps, has significantly changed traditional ways of learning. Using the internet as a source of information for learning can be realized through *browsing, resourcing, searching, communicating,* and *Consulting.* The internet can be empowered by utilizing the web in learning through *Online Courses, Web-Centric Courses* and *Web-Based Courses* [4]. These advances have not only changed the accessibility and dissemination of information but have also affected the way individuals engage with learning materials.

Understanding the relationship between modernization, technology, and the learning process is essential to understanding the broader societal changes taking place in today's times. It is clear that as societies become more interconnected and information-driven, cultural and social norms adapt and change accordingly. For digital natives, the culture of communication in the digital age is a culture of *Texting,* which emphasizes the value of emotional closeness and ease of communication by following the norms of speed, entertainment, personalization and freedom [5]. The development in the era of modernization and technology has a negative impact that makes students begin to fade culture and customs by leaving good habits that have been obeyed by society, which has an impact on bad behaviour towards parents and causes criminal acts [6]. However, there is still a need to delve deeper into the intricacies of this relationship and identify specific mechanisms through which modernization and technology in the learning process shape cultural and social change.

Therefore, researchers want to examine socio-cultural changes in learning during the modernization and technology era. The purpose of this study is to describe the socio-cultural changes in educational institutions and

the learning process and application of digital literacy. This study is expected to provide positive information that social and cultural changes directly impact the learning process, where modernization and technology also continue to develop yearly.

II. METHOD

This research uses a qualitative approach, focusing on a systematic review of existing literature to comprehensively synthesize the research topic. The systematic review process ensures the inclusion of relevant and credible sources from various academic databases and journals. The topics of this literature review are academic articles, research papers, and books exploring the relationship between modernization, technology, and socio-cultural change, with particular emphasis on the role of the learning process. The main object of the study is to gain insight into how learning patterns and educational systems have evolved in response to modernization and technological advances, shaping cultural dynamics in the process.

In the data collection process, researchers undertake several crucial stages. They begin by gathering related information and key findings from each selected source. It encompasses details such as the author's name, year of publication, research objectives, methodology, theoretical framework, and significant findings pertinent to the research question. Subsequently, the collected data is systematically organized and documented for further analysis. The analysis employs thematic analysis, a method involving identifying common themes, patterns, and relationships across the literature. The gathered data is categorized and coded based on these themes, facilitating a comprehensive exploration of the research topics. The overarching goal of the analysis is to unveil significant insights and trends about the impact of modernization and technology on social and cultural dynamics within the learning process.

III. RESULTS AND DISCUSSION

A. Socio-cultural changes in Educational Institutions

Modernization and technology have led to profound socio-cultural changes within educational institutions. Educational institutions are the main pillars in disseminating values, norms, and knowledge to the younger generation. Educational institutions become a milestone of hope in overcoming challenges and obstacles in every change in the community environment [7]. Educational institutions face significant socio-cultural changes in the era of modernization and technological development. This change can be seen from various aspects, including learning methods, curriculum, social relationships, and emphasized values. Traditional teaching methods have been augmented or replaced with technology-enhanced learning approaches, such as platforms, *e-learning*, virtual classrooms, and multimedia resources. The integration of these technologies has expanded educational accessibility, broken down the boundaries of space and time, and enabled individuals from diverse backgrounds to engage in learning. As a result, it has led to increased participation and inclusivity in education.

The development of information and communication technology has affected the learning methods of educational institutions. In teaching, technology emphasizes communication skills and approaches to teaching and learning through the thoughtful use and integration of various media [8]. Traditional and teacher-centred linear learning methods are increasingly replacing more interactive, collaborative, and technology-integrated approaches. Technical devices such as computers, laptops, smartphones, and tablets allow students to learn more interestingly and are based on real problem-solving. The learning process using technology can also encourage active participation and creativity of students to cause socio-cultural changes in the vision and implementation of education. Such is the case with technology such as *e-learning* as a learning tool that can increase student involvement in learning to make it more interactive and fun [9].

Information technology has changed the way we receive information. In the digital age, knowledge and skills are no longer limited to textbooks or printed materials but are available from various online sources. One of the first steps to improve the learning process is to design teaching materials related to the development model to facilitate learning [10]. A convenient and simple learning resource that does not require special equipment and care is not difficult to find. It is inexpensive because it does not require highly qualified special skills and should be prioritized [11]. These changes affect how educational institutions deliver learning materials and require adjustments to provide precise and accurate information. It is also the task of students to develop digital skills to filter and evaluate information obtained from various sources.

During the COVID-19 pandemic in 2020, it has accelerated the change in distance and online learning. The United Nations (UN) has announced that one of the sectors affected by the COVID-19 outbreak is education [12]. Social restrictions and school closures have forced educational institutions to adopt online learning models. This opens up possibilities for students and teachers to interact across geographical boundaries and increases flexibility in learning time. Online learning can use video conferencing platforms to reach teachers and students in different locations. The video conferencing platform Google Meets and Zoom use is the alternative learning medium most widely used by teachers and students during the COVID-19 pandemic because it offers several advantages over other applications. For example, it can be downloaded for free, and students can do live questions

and answers like in a face-to-face classroom [13]. The learning process through the online platform requires strong adaptability and digital literacy so that students can follow the learning process effectively.

The impact of technology and modernization has changed the way students interact and communicate in the school environment. Social media and other digital platforms shape student identity and engagement. This phenomenon affects social relations between students, teachers, and school employees. A teacher's role greatly affects a student's personality, and the student's personality is also greatly influenced by the social media used [14]. In addition, socio-cultural changes are also seen in the acceptance of tolerance, inclusion and cultural diversity in the school environment. In online learning through video conferencing, the activities carried out by students tend to be out of context from learning, such as (1) daydreaming, (2) eating and drinking, (3) playing social media, (4) completing other tasks, or (5) look at the classmate's display on the video screen [15]. This activity will create a communication distraction that the teacher wants to do in providing learning material.

Given the rapid socio-cultural changes, educational institutions are also trying to adapt the curriculum to the needs of modern society. In the context of curriculum digitization, educator preparation plays a key role in the successful use of technology with appropriate and ongoing training in the use of ICT tools and strategies essential for teachers to integrate technology well in learning [16]. The curriculum consists of a series of teaching programs that each educational institution must prepare and is one of the most important teaching elements. Because each educational institution has its characteristics and models, the definition of the curriculum must be adjusted to the unit model of the educational institution [17]. The increasing need for soft skills such as teamwork, communication and creativity affect how the learning process focuses on developing those skills. In addition, it emphasizes the importance of critical and analytical thinking skills to help students deal with complex challenges in an ever-changing world.

Educational institutions experienced significant socio-cultural changes in the era of modernization and technology. Learning processes through innovative approaches, seamless access to information, distance learning, changes in school social and cultural relationships, and an emphasis on soft skills and criticism influence how education is viewed and implemented in an increasingly digitally connected society. Educational institutions must continue adapting and using technology wisely to bring about positive and lasting socio-cultural change. However, rapid technological advances also pose challenges in adapting the education system. Educators and institutions must constantly update their pedagogical practices to align with the evolving technological landscape. In addition, reliance on digital devices can inadvertently widen the digital divide, as some communities may lack the resources to participate in technology-based learning fully.

B. Learning Process and Digital Literacy

The adoption of technology in the learning process also affects digital literacy. Students must now navigate an information-rich environment, distinguishing between trustworthy sources and misinformation. Educators are important in promoting digital literacy skills, such as critical thinking, information evaluation, and responsible digital citizenship. Integrating digital literacy into the curriculum equips learners with the tools needed to navigate the complexities of the digital age. Introducing digital literacy and technology integration into the learning process significantly impacts sociocultural changes in the modernization era. Digital literacy is using, evaluating, and engaging critically with digital media and information technology. Digital literacy can also be interpreted as a person's ability to apply the functional skills of digital devices so that they know how to find and select information, think critically creatively, collaborate with others, and communicate effectively, but remain aware of electronic security and the evolving socio-cultural context [18]. Rapid and widespread technological changes have changed how people interact, learn, and communicate, leading to significant changes in how we perceive and understand the world around us.

Thanks to extensive internet connections and information technology, global knowledge has become more accessible. Learning is no longer limited to local or national dimensions but also includes international dimensions. There are also various references on the internet, research results and articles from various specialist areas, which are available worldwide *(Global World)* [3]. From this statement, digital literacy allows people to learn from various sources of information, access scientific publications, and interact with experts and thinkers worldwide. This opens opportunities to understand cultural differences and views, which can influence existing socio-cultural values and norms.

The role of social media and other digital platforms in the learning process influences how people create and maintain their digital identities. Digital identity involves how a person presents themself online, whether through social media accounts, blogs, or personal websites. Teachers master digital skills to support efforts to build a teacher's identity as a lifelong learner, and as a teacher must evolve to meet the needs of their students [19]. It also affects how people interact and communicate with others and how they find support in the online community. Learning through digital platforms can shape opinions, values, and beliefs that ultimately contribute to broader socio-cultural change.

The introduction of technology in education has led to changes in the teaching and learning process. Formal education uses digital media and software to facilitate learning, such as online learning, instructional videos, and interactive simulations. In addition, informal educational opportunities such as online courses, webinars, and online training courses are becoming increasingly common. Informal education, such as online courses, is more in demand because, in addition to the flexibility of time and place, the organizers offer many attractive, local, national, and international offers [20]. It will not only allow people to access education better, but it will also change the way we learn and teach and the paradigm of traditional education.

Digital literacy plays an important role in changing today's society's socio-cultural values and norms. Exposure to different online viewpoints, ideologies, and values can influence how individuals see the world and themselves. The learning process through different digital platforms can stimulate critical reflection on existing values and open up the possibility of wider and varied socio-cultural changes. Susanto et al. [21] state that documentary film media can also affect students' critical thinking skills. Interactive learning media also impact students' critical thinking skills [22] [23]. Thanks to global access to information, the creation of digital identities, the transformation of education, more active public participation, and changing values and social norms, digital literacy plays a central role in how people interact, learn, and see the world around them. Individuals and communities need to develop strong digital literacy to address ongoing socio-cultural changes in an increasingly digitally connected world.

IV. CONCLUSION

Educational institutions have undergone significant socio-cultural changes in the era of modernization and technology. Technology integration in the learning process has increased accessibility and inclusivity in education but also demands strong digital literacy. The role of social media and other digital platforms in shaping digital identity and social relationships in the school environment is also a relevant factor in these socio-cultural changes. In addition, the emphasis in the curriculum on developing soft skills and critical thinking reflects the needs of modern society. These changes present opportunities to participate actively in social and political issues and pose challenges in using technology wisely. Therefore, educational institutions must adapt and utilize technology intelligently to bring positive and sustainable socio-cultural change.

Given the complexity of socio-cultural changes in educational institutions due to modernization and technology, further studies can be focused on several aspects. First, research on the impact of technology integration in the learning process can provide deeper insights into the effectiveness and efficiency of the methods used. Such studies can also explore how teachers and students can optimize the benefits of technology in education. Second, an in-depth study of the impact of digital identity and social relationships in the school environment is needed. This research examines how digital identity shapes individual self-perceptions and how social media use affects relationships between students, teachers, and school staff. This can help educational institutions respond to challenges and opportunities in managing socio-cultural aspects in the educational environment. Finally, further research is needed on how digital literacy can improve understanding of societal values and norms in modern communities. Such studies can investigate how digital literacy affects individuals' understanding of information and how social media and other digital platforms shape opinions, perspectives, and beliefs that can impact broader socio-cultural change. Consequently, further research in this area will help deal with socio-cultural changes more wisely and support the development of more adaptive and inclusive educational institutions in modernization and technology.

REFERENCES

[1] D. A. Djoh, "DAMPAK MODERNISASI TERHADAP PERUBAHAN SOSIAL MASYARAKAT TANI DI DESA KAMBATA TANA KABUPATEN SUMBA TIMUR," *J. Ekon. Pertan. dan Agribisnis*, vol. 2, no. 4, pp. 332–339, 2018.

[2] M. Resnick, *Rethinking learning in the digital age*. 2002.

[3] R. S. Sasmita, "Pemanfaatan Internet Sebagai Sumber Belajar," *J. Pendidik. dan KONSELING*, vol. 2, no. 1, pp. 99–103, 2020.

[4] D. Rahman, "Pemanfaatan Internet sebagai Sumber Belajar dan Informasi," *Maktab. J. Perpust. dan Inf.*, vol. 1, no. 1, pp. 9–14, 2021.

[5] R. Fauzi, "Perubahan Budaya Komunikasi pada Pengguna Whatsapp di Era Media Baru," *J. Ilmu Komun. Efek*, vol. 1, no. 1, 2017.

[6] S. Darlan, "Analisis Dampak Penggunaan Internet terhadap Budaya dan Tradisi Bagi Remaja Desa Anjir Serapat," *Anterior J.*, vol. 19, no. 2, pp. 42–49, 2020.

[7] M. M. E. I. Bali and H. B. Hajriyah, "Modernisasi Pendidikan Agama Islam Di Era Revolusi Industri 4.0," *MOMENTUM J. Sos. dan Keagamaan*, vol. 9, no. 1, pp. 42–62, 2020.

[8] E. F. Rusydiyah, *TEKNOLOGI PEMBELAJARAN: Implementasi Pembelajaran Era 4.0*. UIN Sunan Ample Press, 2019.

[9] M. R. Maulani, Supriady, and N. Riza, "IMPLEMENTASI E-LEARNING UNTUK MENINGKATKAN PARTISIPASI SISWA DALAM PEMBELAJARAN SEHINGGA LEBIH INTERAKTIF DAN MENYENANGKAN," *J. Ilm. Teknol. Infomasi Terap.*, vol. 7, no. 1, pp. 27–35, 2020.

[10] M. Harjianto, "Pengembangan Bahan Ajar untuk Peningkatan Kualitas Pembelajaran Program Pendidikan Pembelajar Sekolah Dasar," *Didaktika*, vol. 2, no. 1, pp. 216–226, 2006.

[11] Dimyati and Mudjiono, *Belajar dan Pembelajaran*. Jakarta: Rineka Cipta, 2010.

[12] A. Purwanto *et al.*, "Studi Eksploratif Dampak Pandemi COVID-19 Terhadap Proses Pembelajaran Online di Sekolah Dasar," *EduPsyCouns J. Educ. Psychol. Couns.*, vol. 2, no. 1, pp. 1–12, 2020.

[13]   L. F. Haryati and Nursaptini, "Konferensi Video sebagai Alternatif Media Pembelajaran pada Masa Pandemi Covid-19," *AL MA' ARIEF J. Pendidik. Sos. DAN BUDAYA*, vol. 3, no. 2, pp. 85–91, 2021.

[14]   M. Muhyani, D. Fajriansyah, and R. Rofi`ah, "Hubungan peran guru dengan kepribadian siswa dan pemanfaatan media sosial di SMA Riyadlul Jannah," *Ta'dibuna J. Pendidik. Islam*, vol. 11, no. 4, pp. 547–556, Dec. 2022, doi: 10.32832/tadibuna.v11i4.8816.

[15]   Firman, A. P. Sari, and Firdaus, "Aktivitas Mahasiswa dalam Pembelajaran Daring Berbasis Konferensi Video: Refleksi Pembelajaran Menggunakan Zoom dan Google Meet," *Indones. J. Educ. Sci.*, vol. 3, no. 2, pp. 130–137, 2021.

[16]   W. Setyowati, J. Moscato, and C. Embre, "Strategi Pendidikan Dasar untuk Menghadapi Tantangan Era Kurikulum Digital dengan Studi Empiris," *J. MENTARI Manaj. Pendidik. dan Teknol. Inf.*, vol. 2, no. 1, pp. 43–53, 2023.

[17]   Sulaiman, "POLA MODERN ORGANISASI PENGEMBANGAN KURIKULUM," *J. Ilm. Didakt.*, vol. 14, no. 1, pp. 67–73, 2013.

[18]   C. Hague and S. Payton, *Digital literacy across the curriculum*. Futurelab, 2010.

[19]   G. P. D. Saraswati, P. Astuti, R. I. Darmawan, and M. A. S. Idris, "Literasi Digital Untuk Mendukung Upaya Konstruksi Identitas Guru Sebagai Pembelajar Sepanjang Hayat: Pelatihan Bagi Ikatan Guru Indonesia (IGI) Jawa Tengah," *Varia Humanika*, vol. 3, no. 1, pp. 190–196, 2022.

[20]   I. Latifa and F. Pribadi, "PERAN LEMBAGA PENDIDIKAN NONFORMAL DALAM MENGATASI PENGANGGURAN DI ERA DIGITAL," *J. Pendidik. Sosiol. Undiksha*, vol. 3, no. 3, pp. 137–146, 2021.

[21]   H. Susanto, I. Irmawati, H. Akmal, and E. W. Abbas, "Media Film Dokumenter dan Pengaruhnya Terhadap Keterampilan Berpikir Kritis Siswa," *Hist. J. Progr. Stud. Pendidik. Sej.*, vol. 9, no. 1, p. 65, Feb. 2021, doi: 10.24127/hj.v9i1.2980.

[22]   Zulhelmi, Adlim, and Mahidin, "PENGARUH MEDIA PEMBELAJARAN INTERAKTIF TERHADAP PENINGKATKAN KETERAMPILAN BERPIKIR KRITIS SISWA," *J. Pendidik. Sains Indones.*, vol. 5, no. 1, pp. 72–80, 2017.

[23]   A. Hendi, Caswita, and E. Y. Haenilah, "Pengembangan Media Pembelajaran Interaktif Berbasis Strategi Metakognitif untuk Meningkatkan Kemampuan Berpikir Kritis siswa," *J. Cendekia J. Pendidik. Mat.*, vol. 4, no. 2, pp. 823–834, 2020.