

THE ROLE OF TEACHERS IN IMPROVING STUDENTS' DIGITAL LITERACY IN THE GLOBALIZATION ERA: SYSTEMATIC LITERATURE REVIEW (SLR)

PERAN GURU DALAM MENINGKATKAN LITERASI DIGITAL SISWA DI ERA GLOBALISASI : SYSTEMATIC LITERATURE REVIEW (SLR)

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ABSTRACT

This article examines the role of teachers in improving students' digital literacy in the era of globalization using the method Systematic Literature Review (SLR) and PRISMA. Teachers play a central role as facilitators, mentors, and role models in fostering students' digital literacy, which includes the ability to use technology positively, evaluate information, communicate online, and understand the ethics and social implications of technology. The importance of this teacher role is also emphasized in the context of achieving the Sustainable Development Goals (SDGs). However, the development of digital literacy faces various challenges, such as limited access to technology, a lack of teacher and student competency in utilizing digital media, a curriculum that does not fully support it, and digital security threats such as cyberbullying. Strategies to address these challenges include providing engaging digital learning resources, enhancing teacher training in technology proficiency, and collaborating with schools, parents, and the community. Overall, digital literacy is an essential competency for students in the era of globalization. Therefore, teachers are required to continuously adapt and develop their competencies to prepare students to become digitally literate, critical thinkers, and responsible individuals.

Keywords : Role of Teachers, Digital Literacy, Students, Globalization Era, Systematic Literature Review (SLR)

ABSTRAK

Artikel ini mengkaji peran guru dalam meningkatkan literasi digital siswa di era globalisasi menggunakan metode Systematic Literature Review (SLR) dan PRISMA. Guru memiliki peran sentral sebagai fasilitator, pembimbing, dan teladan dalam membina literasi digital siswa, yang meliputi kemampuan menggunakan teknologi secara positif, mengevaluasi informasi, berkomunikasi daring, serta memahami etika dan implikasi sosial teknologi. Pentingnya peran guru ini juga ditekankan dalam konteks pencapaian Tujuan Pembangunan Berkelanjutan (TPB). Meskipun demikian, pengembangan literasi digital dihadapkan pada berbagai tantangan, seperti keterbatasan akses teknologi, kurangnya kompetensi guru dan siswa dalam memanfaatkan media digital, kurikulum yang belum sepenuhnya mendukung, serta ancaman keamanan digital seperti cyberbullying. Strategi yang dapat dilakukan untuk mengatasi tantangan ini meliputi penyediaan sumber belajar digital yang menarik, peningkatan pelatihan guru dalam penguasaan teknologi, dan kolaborasi antara sekolah, orang tua, serta masyarakat.

Secara keseluruhan, literasi digital merupakan kompetensi esensial bagi siswa di era globalisasi. Oleh karena itu, guru dituntut untuk terus beradaptasi dan mengembangkan kompetensinya guna mempersiapkan siswa menjadi individu yang cakap digital, berpikir kritis, dan bertanggung jawab.

Kata kunci : Peran Guru, Literasi Digital, Siswa, Era Globalisasi, Systematic Literature Review (SLR)

1. INTRODUCTION

A teacher is a person who imparts knowledge to his students.. The role of teachers is to encourage students to enjoy reading and writing at school and at home. According to Fauville et al. (2023). Meanwhile, according to Cahyani (2024), the role of teachers in literacy culture in elementary schools is an individual who has the responsibility and authority to guide and manage the educational process for students, both individually and in the classroom context, in formal educational institutions and outside of it. Teachers have an important role in improving the literacy skills of elementary school students. Teachers can act as role models, motivators, facilitators, and creators (Syarni 2024).

According to Utami in Yustina et al. (2022), literacy is the ability to access, understand, and use something intelligently through various activities, including reading, practicing, listening, writing, and speaking. Meanwhile, according to Sulzby (2016), literacy is defined as the ability to read and write. In a broad sense, literacy includes language skills (listening, speaking, understanding, and writing). Digital literacy is a key aspect in building a solid foundation for the personal and professional development of this generation (Muis et al., 2023). In the current era of globalization, digital literacy skills are one of the important competencies that every individual, especially students, must have.

Digital literacy extends beyond the ability to use technological devices; it also encompasses the ability to understand, analyze, assess, and evaluate information obtained through digital media. Teachers serve not only as learning facilitators but also as guides, supervisors, and role models in the use of digital technology. Teachers are required to possess pedagogical, professional, social, and personality competencies integrated with digital literacy, enabling them to guide students in optimal and responsible use of technology (Yustina Celi Setia et al., 2024).

Technological advancements present unique challenges for education, particularly in equipping students with adequate digital literacy skills. Students are expected to utilize technology positively, critically, and creatively to support learning and self-development (Prasetya, 2022; Dewi et al., 2021). However, without proper guidance, technology use can actually have negative impacts, such as information misuse, gadget addiction, and poor digital ethics (Sumiati & Wijonarko, 2020; Terttiaavini & Saputra, 2022).

Efforts to build students' digital literacy must be carried out systematically and sustainably, starting from instilling a culture of literacy in schools to integrating 21st century skills, such as critical thinking, creativity, collaboration, and communication (Rosnaeni, 2021). Therefore, strengthening the role of teachers in fostering digital literacy is one of the keys to success in realizing education that is relevant to the demands of the times. Based on the description above, this research is important to conduct in-depth studies on the role of teachers in developing students'

digital literacy in the era of globalization using the SLR method, as well as the challenges and strategies that can be implemented to optimally develop digital literacy in the school environment.

Of the articles reviewed using the PRISMA method, the researcher used 20 selected articles indexed by Sinta, 5 selected articles from the Scopus database and ERIC. The results and discussion of this article review are presented in this section, outlining key findings regarding the role of teachers in various aspects of literacy, particularly digital literacy, as well as the innovations and challenges that accompany it.

1. Challenges in Developing Digital Literacy

The development of digital literacy, particularly in Islamic elementary schools (MI), faces various challenges. The main challenges identified include limited access to technology, a lack of student and teacher competency in utilizing digital media, an incomplete curriculum, and digital security threats such as *ascyberbullying*. This shows that although digital literacy is an urgent need in the global era, its implementation still requires serious efforts to overcome infrastructure barriers, increase human resource capacity, and adjust the curriculum.

2. The Role of Teachers in Various Aspects of Literacy

The role of teachers consistently takes center stage in most articles. Teachers are positioned as central agents in developing various forms of literacy in students, both basic literacy (reading and writing) and digital literacy.

- **Digital Literacy:** Teachers play a crucial role in fostering students' digital literacy in 21st-century learning. This includes guiding students to utilize technology positively in their learning and equipping them with the skills to use technology effectively, evaluate digital information, communicate online, and understand the social and ethical implications of technology. The importance of teachers' roles is also emphasized in the context of achieving the Sustainable Development Goals (SDGs) through improving digital literacy.
- **Basic Literacy (Reading):** Several articles highlight the role of teachers in improving students' reading skills. For example, the use of a probing prompting learning model with flashcards has been shown to improve the reading skills of third-grade students. Teachers also play a role in addressing reading difficulties in lower-grade elementary school students by identifying contributing factors and implementing engaging methods or additional classes. The PQ4R method has also been identified as an effective approach to improving elementary school students' reading comprehension, where teachers implement active learning strategies.
- **General Literacy Culture:** Teachers play a crucial role in fostering a culture of literacy in elementary schools, including serving as role models, motivators, facilitators, and creators. This aligns with the School Literacy Movement (GLS), which positions teachers as agents of change in fostering a culture of reading and writing.

3. Learning Strategies and Methods

Various learning strategies and methods are reviewed in the articles to improve student literacy:

- Utilization of Technology: Digitizing learning media, such as the use of instructional videos, has proven effective in improving students' digital literacy. The use of information and communication technology (ICT) is also considered essential for teachers to help students meet their learning needs.
- Innovative Media: The development of learning media such as SUMA (Children's Reading Series) books is designed to improve early reading skills in children aged 5-6 years in an engaging and non-distracting manner. Wall magazines also play a positive role in developing student skills, encouraging creativity and motivation to read and write.
- Specific Teaching Methods: The SAS (Structural Analytical Synthetic) method is considered more effective than conventional methods in improving students' beginning reading skills. The Quantum Reading method also shows a positive influence on students' reading comprehension skills.
- Game-Based Learning: Implementation of environmental education through the game "Sampah Go" effectively improves environmental literacy and numeracy in children.

4. Updates that can be done

A comprehensive analysis of the collected article reviews. This section will systematically outline findings related to challenges, teacher roles, learning strategies, and research innovations in the context of digital literacy in the era of globalization, providing a comprehensive overview of current conditions and development directions.

- Specific Focus on MI: An in-depth study of the challenges of developing technology-based media and teaching materials to improve digital literacy in Madrasah Ibtidaiyah students is a new aspect that has not been widely discussed.
- Connecting Digital Literacy to SDGs: One of the key innovations is explicitly linking the role of teachers in enhancing digital literacy to the achievement of the Sustainable Development Goals (SDGs), giving a broader dimension to the importance of digital literacy as a contributing factor to global development.
- Integrative Approach: An environmental education approach that integrates game-based learning ("Garbage Go" game) to improve children's environmental literacy and numeracy is a specific innovation.
- Combination of Learning Models: Use of a combination of models probing prompting and mediaflash cardin reading learning in grade III of elementary school is a novelty in the basic reading learning approach.
- GLS Holistic Approach: Mapping the role of teachers specifically into five main functions (role model, motivator, facilitator and creator, provider of facilities and infrastructure, and provider of reward and punishment) in supporting the School Literacy Movement (GLS) offers a more systematic and practical approach.
- Local Cultural Integrative Approach: An integrative approach in building cultural literacy and citizenship through local culture-based activities, especially traditional games, amidst the challenges of globalization and the current digital era, is a significant innovation.

The rapid development of information and communication technology in the era of globalization has positioned digital literacy as an essential competency that students must master to actively participate in the digital society. However, efforts to develop digital literacy in educational institutions, particularly at the elementary level, still face various challenges such as limited access to technology, lack of teacher and student competency, and digital security threats. In this context, the role of teachers is crucial in equipping students with comprehensive digital literacy skills, including the ability to use technology effectively, evaluate digital information, communicate online, and understand the implications of digital ethics.

This study aims to systematically analyze the multidimensional role of teachers in developing students' digital literacy in the era of globalization. This includes exploring adaptive strategies that teachers can implement and highlighting the contribution of digital literacy to achieving sustainable development goals. This article will offer novelty by specifically highlighting how teachers at the primary education level can equip students with critical skills to navigate and participate effectively in the evolving digital environment, going beyond simply using digital tools, and identifying important aspects such as digital ethics and digital citizenship relevant to the context of globalization that have not been fully explored in the existing literature.

2. METHODS

Systematic literature review (SLR) is a systematic research method for collecting, critically evaluating, integrating, and presenting findings from multiple research studies on a research question or topic of interest. "Systematic" refers to the adoption of a consistent and widely accepted methodology (according to Puspita et al., 2024). The method used in this study is a descriptive-based method. Systematic Literature review (SLR) This research also uses the PRISMA method (Preferred Reporting Items For Systematic Review and Meta Analyses) This type of research is descriptive qualitative, the researcher focuses on collecting and analyzing data from literature sources to evaluate the role of teachers in improving students' digital literacy in the era of globalization. The types of journals obtained come from Scopus, journal articles indexed by Sinta 4, and the ERIC database with the keyword "ROLE OF TEACHER" AND "STUDENT LITERACY" AND "INDONESIAN". This Prism Method consists of 4 steps, namely:

1. The data search was conducted through the provided data sources, using predetermined keywords and topics for review. The researchers obtained 10 articles from Scopus, 20 journal articles indexed by Sinta 4, and 8 databases from ERIC.
2. Data screening, which aims to filter the data found to ensure it aligns with the topic being discussed. The researchers obtained 38 pieces of data. The researchers screened the articles through titles and abstracts, and found five duplicate articles.
3. Data quality assessment, which is based on the full text and pre-defined inclusion and exclusion criteria.
4. The selected data search results will be reviewed further to look for similarities and differences based on the data that has been found.

3. RESULTS AND DISCUSSIONS

Discussion of theoretical results related to data-based research Systematic Literature Review (SLR) The Role of Teachers in Improving Students' Digital Literacy in the Era of Globalization The results of a review of various articles indicate that teachers have a central role in improving students' digital literacy, especially amidst the current of globalization and the rapid development of information technology. Digital literacy is no longer an additional skill, but has become a core competency that students must possess to be able to participate actively and responsibly in the digital society.

Teachers act as facilitators, mentors, and role models in the positive use of technology. They are expected to guide students not only in technical use of technology but also in understanding how to evaluate digital information, be critical of online content, and maintain ethical standards in digital communication. However, the process of strengthening digital literacy is not without its challenges. Based on several articles reviewed, frequently encountered obstacles include limited access to technology in schools, low teacher and student competency in using digital media, inflexible curricula to support digital literacy development, and digital security threats such as data misuse and cyberbullying.

Strategies to address these challenges include providing engaging digital learning resources such as instructional videos and educational games, enhancing teacher training in technology proficiency, and collaborating with schools, parents, and the community to foster healthy and productive digital media habits. In general, digital literacy is not only crucial for supporting the learning process but also contributes to achieving sustainable development goals. Therefore, teachers must continuously adapt and develop their competencies to prepare students to become digitally literate, critical thinkers, and responsible individuals in the global era.

4. CONCLUSION

This study emphasizes the central role of teachers in improving students' digital literacy in the era of globalization, where teachers act as facilitators, mentors, and role models in the positive and responsible use of technology, including the evaluation of digital information and online ethics. This important role also contributes to the achievement of the Sustainable Development Goals (SDGs). However, the development of digital literacy faces challenges such as limited access to technology, lack of teacher and student competency, inadequate curricula, and digital security threats such as cyberbullying. To overcome these challenges, various adaptive strategies need to be implemented, including the provision of engaging digital learning resources, enhanced teacher competency training, and collaboration between schools, parents, and the community. Digital literacy is an essential competency for students in the era of globalization, requiring teachers to continuously adapt and develop their competencies to prepare students to become digitally literate, critical thinkers, and responsible individuals. This study offers novelty by specifically highlighting how teachers at the elementary level can equip students with critical skills to navigate and participate effectively in the evolving digital environment.

Based on the literature review, several important steps can be taken to strengthen the role of teachers in fostering students' digital literacy in the era of globalization. The first priority is the continuous improvement of teacher competency, particularly in technology mastery and understanding of digital ethics. Teachers need

to be equipped not only with technical skills but also with relevant pedagogical approaches to assist students in using technology wisely and responsibly. Based on the results of this study, future researchers are advised to delve deeper into the actual practices of teachers in fostering digital literacy in elementary schools, particularly in local contexts such as Madrasah Ibtidaiyah. Field research involving direct observation, teacher interviews, and case studies of digital-based learning is crucial to strengthen the findings of this literature review. Furthermore, the development of digital literacy evaluation instruments that can comprehensively measure student achievement also needs to be a focus of further research. Future researchers are expected to be able to explain in detail how digital literacy contributes to the achievement of 21st-century competencies and its direct link to the Sustainable Development Goals (SDGs) indicators.

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