

Transforming Indonesian Language Learning: Integrating Digital Literacy And Local Cultural Values In Elementary School Education

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Abstract— The advancement of digital technology and the pressures of globalization present significant challenges to cultural preservation in education, notably in Indonesian language instruction. This study looks at how elementary school teachers in Sukoharjo Regency incorporate digital literacy and local cultural values into language learning. To provide a thorough view of teacher practices, tactics, and obstacles, a qualitative descriptive methodology was used, with data collected from interviews (50%), classroom observations (25%), and documentation (25%). The study found that professors creatively incorporate regional folklore and customs into digital initiatives such as student vlogs, e-comics, and interactive presentations. These efforts correspond with Gilster's definition of digital literacy as an important understanding of digital content, as well as Berns and Erickson's contextual teaching and learning (CTL) approach. Furthermore, Banks' multicultural education theory promotes the inclusion of local culture as a crucial to identity creation in a global society. However, obstacles such as insufficient digital infrastructure, variable teacher competence, and a lack of formal training impede widespread implementation. Despite these limitations, instructors display localized innovation by integrating community-relevant content and technology to increase involvement and preserve cultural identity. This study adds to the educational dialogue by emphasising the transformative potential of culturally grounded digital learning. The ramifications are far-reaching: legislators, curriculum writers, and educators must work together to ensure long-term integration of digital and cultural literacy. By doing so, Indonesia may cultivate digitally capable citizens while remaining anchored in their cultural heritage—an educational vision in harmony with the "Merdeka Belajar" movement.

Keywords—digital literacy, local culture, Indonesian language, teacher strategies, elementary school

I. INTRODUCTION

The digital era has left a huge impact on education, especially the teaching and learning of Indonesian. Digital literacy has evolved as an important 21st-century skills, enabling students to thrive not only as technology users, but also as critical thinkers and creative problem solvers [1], [2]. Nonetheless, globalization and digitization frequently weaken the younger generation's attachment to local cultural identity [3]. As a result, there is an urgent need for educational techniques that not only improve technological skills but also promote cultural values as part of national character development [4]. Although digital literacy is essential for modern education, binding curricula frequently disregard local cultural values. This is especially concerning when learning Indonesian, which is a subject rich in expressive language and cultural significance.

Sukoharjo Regency, renowned for its unique and rich cultural past, provides a great opportunity to incorporate local material into Indonesian language education. However, collaborative efforts to integrate digital literacy into local culture are still relatively

uncommon. Consequently, the objective of this study is to carry out an in-depth study of teachers' practices and strategies for integrating these two important characteristics. This study offers a novelty in the approach to learning Indonesian with a contextual approach that allows the integration of digital literacy with local cultural values contextually in teaching materials, so that students can understand and apply these values in everyday life.

This study is supported by the digital literacy theory according to Gilster [5], which emphasizes the individual's ability to understand, evaluate, and use information through digital technology. In addition, the contextual teaching and learning theory according to Berns & Erickson [6] supports the need for learning that links material to real-life contexts, including local culture. The theory of cultural integration in education according to Banks [7] is also a reference, that multicultural education must accommodate local values to form a strong student identity in a global society.

Several studies have investigated the incorporation of local cultural values into elementary education, notably in the setting of Indonesian language training. For example, Pratiwi and Suwandi [8] stressed the importance of local wisdom in picture storybooks used in Sukoharjo Regency, emphasizing the cultural diversity buried in children's reading. Similarly, Sugiyanto, Widayati, and Pratiwi [9] explored how traditional folktales such as Si Kancil may be used to inculcate character characteristics such as independence, emphasising the relevance of cultural narratives in foundational education. These studies highlight the need of culturally contextualized teaching resources, although they mostly focus on content rather than pedagogical method or technology integration. Furthermore, feminist literary analysis by Pratiwi et al. [10] studied how gender roles in Javanese puppet stories could shape high school curricula, providing further proof of cultural content's instructional worth but missing digital media as a primary focus.

On the other hand, efforts to integrate digital technologies into character and cultural education are still in their early stages. While Pratiwi et al. [11], [12] proposed digital storybooks as a means of communicating local wisdom and character values, the study focused on content development rather than classroom practice or teacher techniques. This indicates a clear research gap: although there is rising recognition of both digital literacy and cultural relevance in Indonesian education, little is known about how teachers actively integrate these areas in regular teaching. Specifically, there is a lack of contextualized research on how elementary teachers in culturally rich places like Sukoharjo face both the challenges of embracing technological advances while preserving local identity. The current study directly addresses this intersection by focusing on teaching techniques, classroom challenges, and the construction of a model that corresponds to technological literacy with cultural rootedness, thereby giving a fresh contribution to both digital literacy and multicultural education discourses.

The main objective of the study is to delve into how elementary school teachers in Sukoharjo Regency integrate digital literacy into Indonesian teaching practices whilst preserving local cultural values. More precisely, the study aims to analyze the tactics used by teachers, identify the obstacles they confront when merging digital and cultural aspects, and indicate a contextualized learning model integrating technology with cultural identity. This dual focus on digital literacy and cultural relevance is especially important in today's educational climate, as global digital exposure frequently compromises local identity and cultural heritage [3]. The study is based on Gilster's [5] concept of digital literacy, which is defined as the ability to analyze and apply digital information meaningfully, rather than simply using technology. It is also backed by Banks' [13] multicultural education theory, which argues for the inclusion of local values in school curricula to develop student identification and cultural understanding.

The significance of this study lies in its timely responses to national and worldwide educational trends. Recent changes in Indonesia, such as the "Merdeka Belajar" project, highlight the need for student-centered and culturally grounded education that prepares learners for global as well as local challenges. This study offers a novel approach to teaching to addressing the dual needs of 21st-century skills and cultural preservation by emphasizing the integration of digital skills and cultural literacy within the Indonesian language topic. Furthermore, the results have broader implications for curriculum designers, lawmakers, and teacher educators who aim to reconcile innovation with tradition in the classroom.

II. METHODS

This study uses a qualitative descriptive approach to examine how teachers in elementary schools in Sukoharjo Regency implement digital literacy and integrate local cultural values in Indonesian language learning. This study uses a qualitative descriptive approach, which aims to describe and understand in depth the phenomenon of implementing digital literacy in Indonesian language learning based on local cultural values. This approach was chosen because it is appropriate for exploring the meaning, experience, and strategies of teachers in complex and contextual learning contexts [14]. The data in this study are in the form of verbal descriptions related to learning practices, the use of digital media, and forms of local cultural integration in Indonesian language subjects. Data sources are divided into two: Primary data, obtained directly from elementary school Indonesian language teachers in Sukoharjo Regency through interviews and observations and secondary data, obtained from learning documents such as lesson plans, digital teaching media, and school policies related to cultural and technological integration. Data collection techniques were carried out by in-depth interviews with teachers to explore strategies, experiences, and challenges faced. Direct observation of the learning process in the classroom and documentation, in the form of analysis of lesson plans, digital media, and student learning products. To ensure the validity of the data, source and technique triangulation techniques were used. Source triangulation was carried out by comparing the results of interviews, observations, and documents. Technical triangulation involves using more than one data collection method. Member checks, such as reconfirming the data with the informant, also help to validate the results and verify the reliability and practicality of the researcher's interpretation [15].

III. FINDINGS

A. Contextualizing Data Sources for Studying Culturally-Responsive Digital Pedagogy

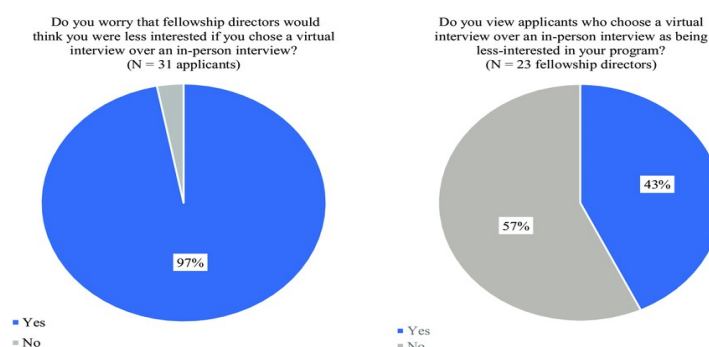
Distribution of Data Sources

Data Source	Percentage
Interviews	50%
Classroom Observations	25%
Documentation (lesson plans, policies, artifacts)	25%

Total = 100%

This distribution aligns well with typical practices in qualitative studies involving teachers and classroom settings, where interviews often dominate, and observations and documents contribute meaningfully.

Visualization of Distribution



The distribution of data sources in this study, which includes 50% interviews, 25% classroom observations, and 25% document analysis reflects an organized and balanced qualitative approach. The use of interviews indicates that the researchers will dive deeply into the subjective experiences, teaching methods, and perspectives of teachers at elementary schools in Sukoharjo Regency regarding the integration of digital literacy and local cultural values into Indonesian language teaching. This method is in line with Creswell's [14] stance that interviews play an important role in qualitative research, especially when the goal is to better understand complex human behavior and contextual practices in educational contexts. Interviews are a valuable resource for

understanding how teaching approaches evolve in response to technology and cultural challenges as they capture teachers' personal narratives.

Classroom observations (25%) enhance the interviews by providing empirical proof of the teachers' reported strategies. Observational data allow educators to watch directly how digital media and cultural content are used in practice, providing a more nuanced understanding of how theory translates into actual teaching. This is in line with Setyawan [16] findings, which emphasized the importance of observation in assessing the effectiveness and authenticity of culturally responsive teaching in real-time learning situations. Furthermore, the usage of paperwork (25%) such as lesson plans, digital teaching resources, and school policy documents adds another level to triangulation. These resources offer insights into the planning and institutional frameworks that either facilitate or impede the integration of digital literacy and cultural values in educational settings. According to Fitriyani [17], these resources play an important role in revealing how educational policies and teaching materials affect classroom teaching.

When compared to prior studies, the current research demonstrates both continuity and originality. For example, Darmawan et al., [18] studied digital learning solutions for teaching Bahasa Indonesia but did not specifically address cultural integration. Similarly, Ningsih [19] examined how school policies influence cultural education, however their studies focused more on administrative perspectives than classroom-level implementation. In contrast, this study focuses not only at teachers' methods, but also at how digital tools and cultural content might be seamlessly integrated into regular education. The approach is consistent with Berns and Erickson's [6] ideas of contextual learning, which promote that learning should be intimately related to students' living experiences, including their cultural backgrounds.

B. Integrating digital literacy in Indonesian language learning based on local cultural values.

The results of the study show that digital literacy is being used more widely but inadequately in Indonesian language instruction at elementary schools in Sukoharjo Regency. According to observations and interviews, teachers are beginning to implement digital tools into their classroom in meaningful ways. These include using of e-books containing traditional stories, interactive platforms like Canva and PowerPoint, and class social media that show student work. Such methods demonstrate incremental progress toward the ideal of 21st-century learning, in which students are active producers of knowledge rather than passive consumers of information [1]. This is consistent with Gilster's [5] definition of digital literacy, which emphasizes not just technical skill but also critical thinking and contextual knowledge in digital environments.

The data source distribution (50% interviews, 25% observations, and 25% document analysis) shows a purposeful methodological choice that emphasizes teacher perspectives while promoting them with empirical classroom evidence and institutional documentation. Interviews revealed important insights into teacher's strategy and perceptions, while observations verified that digital tools were largely used for project-based activities such as digital storytelling, poster making, and local cultural-themed presentations. These data show that the integration of digital literacy is arising organically from teacher's efforts to make language instruction more relevant and engaging for their students, instead of becoming a top-down mandate.

Despite positive practices, the study revealed a number of structural limitations. The most significant of these include limited access to technological resources, disproportionate internet connectivity, and a lack of regular teacher training in creating or adapting digital materials. These challenges are in line with prior studies on digital integration in Indonesian education, such as that of Nugroho [20], who found that enthusiasm for digital learning was frequently limited by infrastructural shortages and insufficient professional development. In addition, although cultural data such as traditional stories and regional figures is incorporated, there is a preference for surface-level portrayal rather than deep, critical engagement with cultural values. This presents a gap between the theoretical promise of digital cultural integration, as stated by Banks [7], and the practical challenges that teachers meet on the ground.

In comparison, previous studies, such as those by Fitriyani [21], focused mostly on policy-level initiatives to incorporate cultural features into curricula, but this study provides tangible, classroom-level evidence of how such integration is taking shape. In contrast to more abstract government regulations, the findings here suggest to localized innovation, with teachers employing community-relevant stories and tools despite technical constraints. The documentation analysis, including lesson plans and

instructional media, supports this by indicating how contextual teaching methods are being implemented [6]. Teachers provide culturally contextualized classes that not only teach the structure of the Indonesian language, but also cultivate student identity and appreciation for local heritage.

In the broader context of Indonesian educational reform, particularly under the "Merdeka Belajar" (Freedom to Learn) policy framework, this study resonates with contemporary trends promoting autonomy, cultural relevance, and technology fluency in learning. [4]. The study addresses a significant national need by providing a contextual teaching strategy involving digital and cultural literacies: developing internationally competent yet locally grounded students. While digital tools provide new teaching opportunities, it is the intentional matching with culturally relevant content that gives this method its revolutionary potential.

This study contributes significantly to the discussion of digital and cultural integration in primary education. It shows empirically that teachers are not just adapting to digital technologies, but also striving to embed these practices in culturally significant content. However, it also identifies technical obstacles that must be addressed before such techniques may be scaled fairly. Thus, the findings advocate for targeted investment in teacher training, infrastructure, and curriculum development to meet the dual aims of digital fluency and cultural identity construction.

C. Teacher Strategies in Integrating Local Cultural Values and Digital Literacy

Teachers in Sukoharjo Regency have exhibited a high level of innovation in integrating local cultural values with digital literacy into Indonesian language lessons. They combine area folklore into digital teaching texts, such as the legends of the Bengawan Solo River, as well as culture-based projects like student vlogs on local customs and digital comics about regional people. Furthermore, they frequently work across disciplines, tying language teaching to topics such as Arts and Culture (SBdP) to develop multimedia outputs. Teachers foster involvement and cultural pride by publishing student work on digital platforms and social media. This integration of pedagogy and technology supports Gilster's [5] notion of digital literacy as not only technical skill but as cultural comprehension, with digital media serving as a bridge between tradition and modernity.

These approaches correspond to the contextual teaching and learning (CTL) framework, which emphasizes the need of rooting learning in students' life experiences [6]. Teachers can improve the relevance and resonance of Indonesian language training by engaging students in projects that are directly related to their cultural surroundings, such as developing digital narratives based on local traditions. Such contextualization has been helpful in improving student involvement and motivation, as evidenced by Faizhal [22], who examined the influence of CTL assisted by digital technologies on student creativity.

In multicultural education, incorporating local cultural elements into the curriculum helps students preserve a strong cultural identity in the face of globalization. According to Banks [7], including cultural knowledge into education is critical for the development of a well-rounded, culturally conscious individual. This approach is reflected in Sukoharjo's digital activities, which protect and transmit local values through multimedia assets. Ardi, et al. [23], who conducted study in Makassar, found that local wisdom-based learning increases appreciation for cultural heritage and positively molds student character.

Studies on digital culture-based modules further confirm the efficacy of this approach. Pramana [24] discovered that Balinese-themed digital content significantly increased students' cultural literacy, whilst Parta [25] observed that such materials further improved civic and Pancasila-related competences. These results highlight the pedagogical validity of using local material as the foundation for digital education, implying a high likelihood of replication in Sukoharjo and elsewhere. However, the study identifies significant implementation issues. Teachers have limited access to digital infrastructure, uneven levels of digital skill, and insufficient professional development. These challenges are congruent with those identified by Solih & Julianto [26] and Putra et al. [27], who found similar challenges to the adoption of instructional technology in Indonesian schools. While certain Sukoharjo institutions have made progress in integrating digital cultures, there is still a pressing need for systematic support.

Policy recommendations based on these findings include developing localized digital curricular modules, such as e-books based on Sukoharjo culture, and verifying them through expert and user trials. Teachers' professional development should be prioritized, with a focus on media creation, narrative, and instructional design. Partnerships with cultural groups and platforms, such as BASAbali, may provide authentic materials, establishing relationships between schools and local cultural ecosystems.

Eventually, integrating digital literacy with local cultural values into Indonesian language training has shown significant potential in developing digital citizens who are not only literate but also culturally and ethically sensitive. This paradigm not only coincides with the Pancasila Student Profile's ideals of belief, independence, critical thinking, and cultural roots, but it also addresses significant problems in 21st-century education. Thus, this approach enables a strategic convergence of pedagogy, technology, and national identity, providing a plausible path for education that is both future-oriented and culturally grounded.

IV. CONCLUSION

This study shows that integrating digital literacy with local cultural values into Indonesian language training is both feasible and effective, particularly in elementary schools in Sukoharjo Regency. Teachers showed initiative and creativity by using regional folklore, multimedia resources, and project-based learning methods to contextualize language instruction and raise cultural awareness. This approach not only coincides with Gilster's [5] concept of digital literacy as critical digital interaction, but also promotes contextual teaching and multicultural education concepts. Despite promising practices, structural challenges persist. These include limited access to technology, uneven digital competence among teachers, and insufficient institutional support for digital-culture integration. While educators are innovating at the classroom level, scaling these practices requires systemic intervention, including targeted professional development and culturally responsive curriculum development. Overall, the findings emphasize the strategic potential of a dual-focus educational model that promotes digital fluency while fostering students' cultural identity.

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