

Improving Digital Literacy Skills through Descriptive Text Learning in Students

Lenggar Khalifahtullah Satyabuwana, Faculty of Teacher Training and Education
Tanjungpura University, Pontianak, Indonesia.

f2161251013@student.untan.ac.id

089616824747

Abstract: This Classroom Action Research (CAR) aims to enhance the digital literacy skills of 7th-grade students at SMP Bina Mulia Pontianak through a descriptive text-based learning approach. The urgency of the research is based on the rise of "infodemics" (hoaxes) and the need for innovative teaching method adaptation in the digital era. The research subjects were 22 students, and the study was conducted in two cycles, measuring four aspects of digital literacy: Access, Evaluation, Creation, and Communication. The results showed a significant increase in the students' average scores, reaching 88.2 in Cycle II from the Pre-Cycle condition (58.0). The highest improvements occurred in the Communication (52.1%) and Evaluation (45.3%) aspects, driven by structured practical assignments, including analyzing hoax cases and creating/uploading descriptive texts onto digital platforms. The scientific contribution of this research is the confirmation of the strategic role of the Indonesian Language subject, particularly through the descriptive text approach, as an effective framework for instilling critical and technical digital literacy, which is highly relevant in combating disinformation in the digital era.

Keyword: Digital Literacy, Descriptive Text, Classroom Action Research (PTK), Critical Skills.

Introduction

Digital literacy has become an essential competency, especially since the online learning policy during the COVID-19 pandemic (Adibah & Sari, 2021; Hoar Siki et al., 2024; Kumalasari et al., 2022; Suryani & Wiryadigda, 2022). However, in reality, many teachers are still experiencing digital illiteracy (Aswir et al., 2020), or are not yet skilled in utilizing ICT for effective learning (Wardhana et al., 2021). The main challenge that arises is the rise of infodemic on social media (Annisa Hutapea, 2021), which requires students to have the ability to sort information (Tarigan, 2021), and an understanding of digital media ethics (Rahman et al., 2023). Adaptation to technological developments is a must in the field of education (Indriani & Gushevinalti, 2022), to prepare students to face the challenges of the 21st century (Hidayat et al., 2025). This ability goes beyond the technical skills of using gadgets (Hakim & Pitoyo, 2022), includes the critical ability to understand (Prasetiyo et al., 2022), and use information from various digital sources (Manggopa & Kumampung, 2023).

Indonesian subjects have a strategic role in instilling this critical digital literacy (Montessori & Indrawadi, 2022). Through a text-based approach to description (Miliou & Angeli, 2023), learners are trained to analyze narratives (Maknuni, 2024), and evaluate the ideology behind a content (Sudarman et al., 2023), as well as describe objects based on what the senses perceive (Ariyana et al., 2020). This approach has

been proven to form students who are able to think critically (Aghnia et al., 2025), and respond to digital information responsibly (Prasastiningtyas et al., 2024). Previous research has also shown the importance of teaching innovation (Nur Alifa et al., 2023), to improve digital literacy (Ao Sun, 2025), both through direct counseling (Nur Anggraeni et al., 2023), and its significant implementation (Parveen et al., 2024).

However, efforts are still needed to integrate digital literacy in a practical way (Gunawan & Dyatmika, 2022), into the curriculum of Indonesian subjects. This is in line with the findings of Handayani, (2022) in an article entitled "Improving Reading Literacy and Writing Literacy Through Digital Literacy in Elementary School Students in Buleleng District" which proves that the application of digital literacy significantly (Maola et al., 2024), can improve reading skills (Calero-Mieles & Barban-Forte, 2024), and write students (Hasibuan et al., 2025). Therefore, this classroom action research aims to test and analyze (Furbani et al., 2025), the effectiveness of the text-based learning approach in improving the digital literacy skills of students at SMP Bina Mulia Pontianak, especially in four aspects including Access, Evaluation, Creation, and Communication.

Methods

This research is a Classroom Action Research (PTK) that aims to solve learning problems while improving its quality, carried out in two cycles with the stages of planning (Batubara & Gustafaruddin, 2024), action (Romeli et al., 2023), observation (Rahma et al., 2025), and reflection (Muhammad & Ratri, 2024). The subjects of the study were 22 students of class VII C SMP Bina Mulia Pontianak. The selection of subjects is based on the consideration that grade VII students are at a vulnerable age (Illahi & Rita Gani, 2024), to exposure to hoaxes (Subagjo, 2023), and require improvement of digital literacy skills (Rosyida et al., 2020).

Data were collected through direct observation (Gina et al., 2024) during the learning process (Rusdy, 2021) and using the rubric of digital literacy skills assessment (Lalu Muktar & Burhan, 2025), which focused on the analysis of descriptive texts (Perdana et al., 2019). This rubric measures four key aspects of digital literacy ranging from access, evaluation, creation, and communication (Afandi et al., 2024), using a modified Likert rating scale with a score of 1 (Very Poor) to 5 (Excellent) (W. S. E. Salsabila & Susantini, 2022), to reflect engagement (Kantona & Munadi, 2024), attention (Salazar Gómez et al., 2018), cooperation (Mirnawati et al., 2022), and students' problem-solving skills (Harefa, 2025). Before use, the rubric instrument is validated by two experts (lecturers/senior teachers) in the field of Indonesian to ensure the validity of the content (Afri et al., 2023) and the validity of its constructs (Rezeqi et al., 2024). The validation results show that the rubric is in the 'Valid' category and is ready to use.

Results

The results of this study show an increase in students' digital literacy skills from Cycle I to Cycle II. This increase is obtained from the calculation of the average score in each cycle

Table 1. Data on Digital Literacy Skills Improvement

No.	Cycle	Average Score	Increased	Information
1.	Pre-Cycle	58.0	-	The initial condition of the student before treatment.
2.	Cycle I	65.5	12.9%	After the initial treatment, the improvement was not optimal.
3.	Cycle II	88.2	34.7%	There is an improvement after the improvement of the action.

This improvement was especially noticeable in all aspects, with a spike in the access and creation aspects thanks to the adjustment of actions in Cycle II.

Table 2. Improvement Based on Digital Literacy Aspects

No.	Aspects	Average Cycle I (%)	Average cycle II (%)	Percentage Increase
1.	Akses	68.2	89.5	31.2%
2.	Evaluation	59.8	85.9	45.3%
3.	Creations	63.4	85.7	35.2%
4.	Communication	60.3	91.8	52.1%

The highest increase was recorded in the Communication (52.1%) and Evaluation (45.3%) aspects. Improvements in the aspect of Evaluation (Harefa, 2025), which focus on the ability to verify information (Suryani et al., 2023), are particularly relevant to the theory of digital literacy (Dwiki Darmawan et al., 2025), which places critical thinking (Sintia et al., 2025), as a core component to counteract the infodemic (Anita et al., 2024). With the assignment to dissect hoax cases (Jaya et al., 2024), a text-based approach to description (Putri, 2023), has succeeded in honing students' ability to analyze and verify digital content.

The increase in the Creation (35.2%) and Access (31.2%) aspects in Cycle II, which involves the creation (Adna dos Santos et al., 2024), and the uploading of description text (Jordan et al., 2025), to digital platforms (Aoumeur Soufghalem, 2024), shows a shift in the role of learners (Kaur et al., 2022), from just being consumers (Sappaile, 2025), to capable digital content producers (Icaza Paredes & Rodriguez Alarcon, 2025). This is in line with the constructivist perspective (Mawardi et al., 2024),

where learners build their technical and critical understanding (Ilinawati et al., 2025), through hands-on practice (Chaerani et al., 2024), in a digital environment (Panbuselvan, 2024). Therefore, these results confirm that the integration of descriptive texts with digital practices effectively equips learners with critical, ethical, and technical skills in the digital age.

Discussion

The application of a text-based approach to description through the PTK cycle has proven to be effective in improving students' digital literacy. Liu et al., (2020) Stating repetitive actions and continuous improvement allows teachers to adapt teaching methods accordingly and effectively to the needs of students. In Cycle I, teachers are aware of students' difficulties in evaluation, communication, access, and creation (Glessmer et al., 2024), so in Cycle II, teachers provide more examples of hoax cases and ask students to dissect them in depth (Obidovna, 2023).

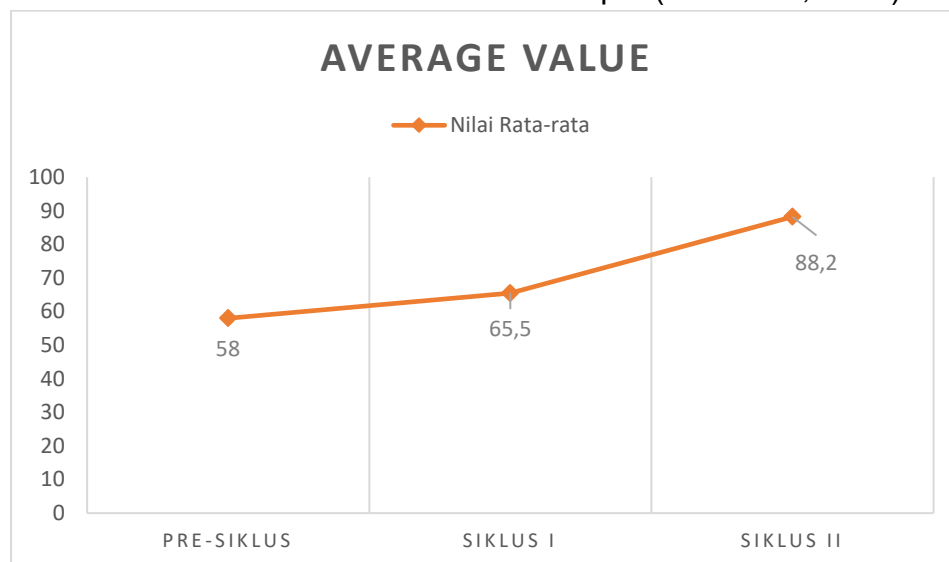


Figure 1. Improvement in the Average Score of Digital Literacy Skills

Graph 1 shows a significant jump in average values from Pre-Cycle conditions (58.0) to 65.5 in Cycle I, and peaked at 88.2 in Cycle II. The increase of 34.7% in Cycle II, compared to 12.9% in Cycle I, strongly underscores the effectiveness of the improvement measures carried out by teachers (Ridwan et al., 2022).

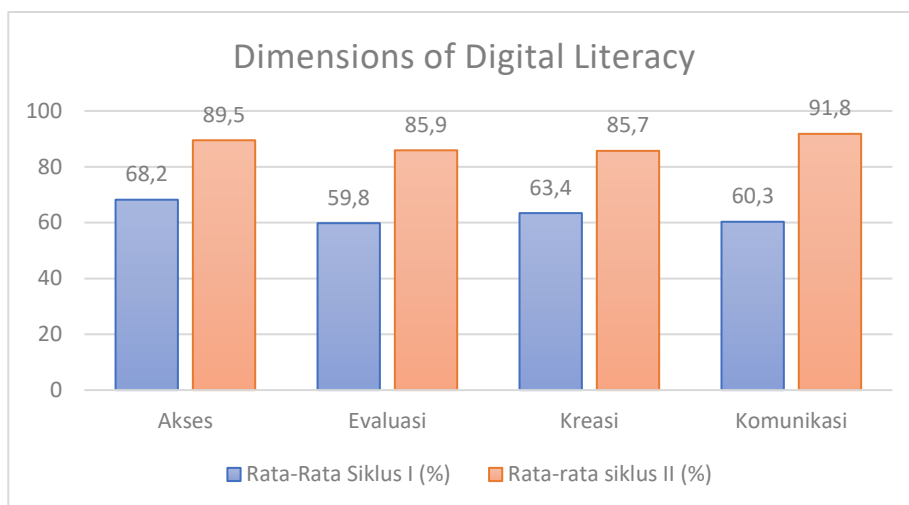


Figure 2. Comparison of Average Digital Literacy Skills Scores

The positive impact is seen evenly across all dimensions of digital literacy. Graph 2 shows a substantial increase in all aspects in Cycle II compared to Cycle I. The most notable improvement was in the Communication (up 52.1% to 91.8%) and Evaluation (up 45.3% to 85.9%) aspects. The increase in the Communication aspect shows an increase in interaction skills (Rattan, 2023), and communication (Hinza, 2024; Nengsi & Sartika, 2022), effectively and responsibly (D. John, 2022). The surge in the Evaluation aspect is driven by the assignment to dissect hoax cases (Siga et al., 2023), which hone students' critical skills in analyzing and verifying digital information (Susilawaty et al., 2024), which is very crucial in the infodemic era (Maryani & Wulandari, 2025). Meanwhile, the improvement of the Communication aspect shows the success of this approach in training learners to interact and communicate information effectively and responsibly in the digital environment. Graph 2 also shows an increase in the Access (31.2%) and Creation (35.2%) aspects. This increase reflects the success of the Cycle II action adjustment that encourages learners to actively search for information using search engines and filters (Hariadi et al., 2024), as well as create and upload content to digital platforms (Maryani & Wulandari, 2025). This proves that learners are not only consumers, but also capable digital content producers (Maella et al., 2025).

This shift in roles is supported by a constructivist perspective (Gayathri, 2024), in education (Earl et al., 2021). Learners build their technical, critical, and ethical understanding (Itani et al., 2024), through hands-on practice (et al., 2025), in an authentic digital environment (Moura et al., 2025). Specifically, the increase in access and creation aspects in Cycle II is the result of adjustments to macro and micro adaptation measures (Szplit, 2021). Teachers not only focus on text analysis (Ningtyas & Rahmawati, 2023), but also Improve retention and comprehension for academic success (Zhang, 2019), by adding more structured practice assignments (Attaalla, 2021; Zhang, 2019). For example, students are asked to create descriptive text and

upload it to digital platforms (Kusumasari et al., 2024), as well as search for information using various search engines and filters (Susanti & Nurhamidah, 2022). As a result, learners are not only able to understand content (Marlina & Hendro Pramono, 2024), but are also proficient in discovering (Fadilla et al., 2023), and creating content independently (Salindri et al., 2024).

These results underscore the important role of Indonesian subjects (Rahmanida Nst et al., 2022; Ramadhan et al., 2024), as a means to form students who are critical of digital information (Анурфриева & Гузенко, 2020). Analysis of descriptive texts that they often encounter on a daily basis (Hernández-Rodríguez, 2023), on social media or e-commerce (Sun et al., 2023), becomes a practical tool for practicing evaluation skills (Dwi Norma Apriyanti et al., 2024), and verifying information (Rudenko et al., 2023). These skills are essential to equip them not to get caught up in infodemic (Pérez Garcia-Madrid et al., 2025; Shesterkina et al., 2021). as well as Indonesian subjects (Dewi, 2023), through the analysis and creation of descriptive texts (Munitasari et al., 2022), serve as an effective curriculum framework (Astuti et al., 2022), to comprehensively instill digital literacy skills (S. Salsabila & Riadi, 2022), equip students with practical tools (Luthfiah, 2025), to evaluate and create responsible content (Ishmah Rahadatul Aisy et al., 2023).

Conclusion

This Class Action Research (PTK) concluded that the description text-based learning approach is very effective in improving the four aspects of digital literacy of grade VII students of SMP Bina Mulia Pontianak, a significant improvement achieved through improvement actions in the form of structured practice assignments, such as the analysis of hoax cases and the creation and uploading of description texts to digital platforms. These findings scientifically affirm the strategic role of Indonesian subjects as a practical curriculum framework to instill critical and technical digital literacy, especially in training Evaluation and Communication skills, which are essential in facing the challenges of infodemi. Practically, this approach offers an innovative learning model for Indonesian teachers to shape learners into responsible producers and users of digital information, with implications for schools to support the implementation of this method through the provision of facilities and training; Furthermore, future research is suggested to explore the effectiveness of this approach in other subjects or its impact on long-term digital literacy competencies.

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