

Analysis Of The Use Of Technology-Based Learning Media In Improving Learning Motivation In Grade V Students Of SDN 2 Sama Guna

Alpan Mahardika¹, M. Taufik², Rauhun Jannah³

^{1,2,3} Program Studi Pendidikan Guru Sekolah Dasar, STKIP Hamzar Lombok Utara

Article Info

Article history:

Accepted: 03 Agustus 2026

Published: 17 September 2026

Keywords:

Technology-Based Learning Media,
Learning Motivation, Elementary
School.

Abstract

This study aims to analyze the use of technology-based learning media in the learning process, determine students' learning motivation levels, and identify the supporting and inhibiting factors of using technology-based learning media in improving the learning motivation of fifth-grade students at SDN 2 Sama Guna. The study employs a descriptive qualitative approach with primary data sources consisting of classroom teachers, students, and the principal, while secondary data sources include learning documents and activity documentation. Data were collected through observation, interviews, and documentation, and analyzed using data collection, data reduction, data presentation, and conclusion drawing techniques. The findings, drawn from classroom observations and interviews with the classroom teacher, students, and principal, show that the use of technology-based learning media, such as instructional videos, PowerPoint presentations, projectors, and smart TVs, was associated with a more engaging and interactive learning environment, reflected in a shift from passive, distracted behavior during conventional lecture-based sessions to more focused attention, active participation, and visible enthusiasm once audio-visual media were introduced. Supporting factors include the availability of technological facilities, school support, and students' learning enthusiasm, while inhibiting factors include teachers' limited ability to operate technology and the suboptimal utilization of learning media. Therefore, the use of technology-based learning media has the potential to become an effective strategy for improving elementary school students' learning motivation.

This is an open access article under the [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)



Corresponding Author:

Alpan Mahardika

STKIP Hamzar Lombok Utara

Email: alpanmahardika506@gmail.com

1. INTRODUCTION

Education is a crucial factor in developing quality human resources. Through education, individuals are able to optimize their potential in terms of knowledge, skills, and attitudes. Education also serves to shape character and enhance critical and creative thinking skills, which are essential for facing the dynamics of contemporary developments, as mandated by Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System (2003). The development of science and technology in the era of globalization has triggered significant transformations in various domains of human life, including the education sector. Advances in information and communication technology facilitate easy access to information and expand learning resources, no longer limited to the walls of the classroom. Therefore, the modern education system is required to continuously adapt to technological advances to ensure the effectiveness, efficiency, and relevance of the learning process (UNESCO, 2020).

In today's digital era, technology integration in education is no longer an option but an imperative. Technology enables learning to transcend conventional classroom methods and

become accessible through various digital platforms and media. The use of technology creates a far more interactive, dynamic, and engaging learning experience for students, ultimately helping them achieve optimal competencies (Ministry of Education and Culture, 2022). One key manifestation of this integration is the use of technology-based learning media in daily teaching and learning activities. Technology-based learning media refers to the tools teachers use to deliver educational materials through electronic and digital devices such as computers, projectors, the internet, interactive learning videos, and various educational applications. The use of these instruments enables the delivery of material to be clearer, more engaging, and more easily visualized by students (Arsyad, 2019).

Learning media play a crucial role in determining the success of a learning process. These media serve not only as a tool for conveying messages but also facilitate students' understanding of the material presented by the teacher, while significantly increasing their attention, curiosity, and interest in learning activities (Sudjana & Rivai, 2018). As stated by Nurfadhillah (2021), learning media is anything capable of creating conditions in which students can acquire knowledge, skills, and attitudes more effectively. Furthermore, Andrijati (2014) emphasized that the effectiveness of media use is greatly influenced by the educator's ability to manage and select media appropriate to the characteristics of the material and students. The types of media used are increasingly diverse, ranging from print, visual, audio, audiovisual, to interactive and purely digital media (Sari, 2020).

Learning motivation is a key determinant of a student's learning success. Motivation can be defined as a psychological drive originating from within (intrinsic) or from outside (extrinsic) students to actively engage in a series of learning activities to achieve specific academic and life goals. Students with high motivation tend to demonstrate persistence, a strong sense of curiosity, and active participation in every stage of the learning process (Uno, 2019). This is in line with Slavin's (2018) view, which asserts that learning motivation is closely correlated with student achievement; highly motivated students are usually very enthusiastic, while low-motivated students tend to be apathetic, easily bored, and lack clear goals in their learning process. Characteristics of high motivation, according to Sardiman (2014), include perseverance in facing tasks, persistence in the face of difficulties, and a love of problem-solving. Conversely, students with low motivation are easily discouraged and unable to focus on the learning material.

Several previous studies have demonstrated a positive correlation between the use of technology-based learning media and increased student learning motivation. Research conducted by Rahmah and Hadi (2023) showed that the adoption of digital media such as interactive applications and educational videos can increase the activeness and motivation of elementary school students because these media create an atmosphere that is far from monotonous. Similarly, Ariaty et al. (2024) found that interactive media that facilitates two-way communication has a direct impact on increasing curiosity and learning participation. Specific studies on audiovisual media by Kalang et al. (2024) and comprehensive research by Agustina et al. (2025) and Atika et al. (2025) consistently confirm that visual and audio presentations combined through digital devices significantly boost student enthusiasm, focus, and the quality of understanding in the classroom.

Although technology-based media offers various advantages theoretically and empirically, its implementation in the field still often clashes with various practical challenges. These obstacles vary from teachers' reliance on conventional (teacher-centered) methods, limited technological infrastructure, to minimal digital literacy and competency among educators (Kemdikbud, 2023). This is clearly illustrated in the context of initial observations conducted by researchers on May 12, 2026, at SDN 2 Sama Guna, specifically in grade V. Based on direct observations, it was indicated that the utilization of technological facilities such as computers, projectors, smart TVs, and internet access, which are actually available at the school, is still not running optimally.

Fifth-grade teachers at SDN 2 Sama Guna still appear to be predominantly using traditional lecture methods, which leads to underdeveloped and passive student activity. The

limited variety in the use of resources such as smart TVs and LCD projectors results in a monotonous classroom atmosphere and fails to fully engage students' learning interests. The direct impact of this situation is low student motivation, manifested through indicators of lack of focus when teachers explain material, low participation in question-and-answer activities, and decreased perseverance in completing daily assignments.

Based on the gap between the available facilities and the reality of their utilization in the field, as well as their impact on learning motivation, a more in-depth empirical analysis is needed. In contrast to previous studies that generally focused purely on quantitative correlations, this study has novelty by qualitatively dissecting the implementation process, students' psychological responses, and identifying obstacles and support from a real-life perspective in schools. Therefore, this study aims to: 1) comprehensively analyze the use of technology-based learning media in the learning process of fifth-grade students at SDN 2 Sama Guna; 2) determine the level of student learning motivation when the media is implemented; and 3) identify factors that support and inhibit the use of technology-based learning media at the research location.

2. RESEARCH METHODS

This study employed a qualitative approach with a descriptive design. The choice of a qualitative approach was based on the primary objective of the study, which is to understand a phenomenon naturally and in-depth from the perspective of the research subjects themselves. This approach allows researchers to provide a comprehensive overview of the dynamics of technology-based learning media use and its implications for student learning motivation, without intending to make numerical generalizations or test statistical hypotheses (Creswell, 2021). In addition to qualitative descriptive analysis, this study more specifically employed a case study strategy. The case study was chosen because it sharply focused on a single entity or phenomenon that is limited in space and time: the learning practices in grade V of SDN 2 Sama Guna (Yin, 2018).

To ensure the research proceeded systematically, it was carried out through several defined procedural stages. The first stage was preparation, which included conducting pre-research at SDN 2 Sama Guna in early 2026, formulating the research proposal, and designing the observation and interview guidelines used in the field. The second stage was field entry, during which the researcher obtained formal permission from the school and introduced the research aims to the classroom teacher, students, and principal before data collection began. The third stage was data collection, carried out from May to June 2026 through passive participant observation, semi-structured interviews, and documentation, as described in the following sections. The fourth stage was data analysis and verification, in which the collected data were reduced, presented, and interpreted using the interactive model of Miles and Huberman, followed by source and technique triangulation and a member check with informants to confirm the accuracy of the findings. The final stage was reporting, in which the verified findings were compiled into a structured narrative account of the research results.

The research was conducted at SDN 2 Sama Guna, which is geographically located in Batu Belak Hamlet, Sama Guna Village, Tanjung District, North Lombok Regency. The research implementation took place in the second semester of the 2025/2026 academic year, which began with the preparation of the proposal in March 2026, until the collection of field data in May to June 2026. The determination of this location was based on the results of the pre-research, which showed the availability of technological facilities (smart TV, projector, internet) but was colored by the challenge of less-than-optimal utilization by educators and early indications of low student learning motivation.

The data sources in this study are classified into two categories: primary data sources and secondary data sources. Primary data sources were obtained directly in the field, including: 1) Grade V teacher (Mrs. Yeni Agustina, S.Pd.) as the main subject of learning management; 2) Grade V students (represented purposively, for example, Dimas) to capture factual learning responses and motivation; and 3) Principal (Mrs. Maria Astuti, S.Pd.) as the policymaker. On the other hand, secondary data sources were obtained from supporting documents such as the

Learning Implementation Plan (RPP), syllabus, grade list, photo documentation of learning activities, and various relevant academic literature (Sugiyono, 2022; Moleong, 2021).

The data collection techniques applied included three main methods. First, passive participant observation. The researcher was present directly in the fifth-grade classroom to systematically observe and record the teacher's use of technology devices, as well as recording student reactions, enthusiasm levels, and attention (motivation indicators) using a structured observation sheet. Second, in-depth interviews. Semi-structured interviews were conducted with teachers, students, and the principal to explore perceptions, experiences, obstacles, and policies that could not be observed visually (Setiawati, 2024). Third, documentation. The researcher collected authentic evidence in the form of photographs of teachers operating projectors/smart TVs, students' moods while watching educational videos, and administrative documents from the school (Nur, 2024).

The structured observation sheet used in the first technique was developed around five learning motivation indicators adapted from Uno (2007) and Sardiman (2011): attention, activeness, interest, enthusiasm, and persistence. For each indicator, the researcher recorded specific, observable behaviors, for example, whether students kept their eyes on the presentation without being reminded (attention), whether they voluntarily asked or answered questions (activeness), whether they asked to watch a video again or explore materials beyond what was assigned (interest), whether they showed visible expressions of excitement such as smiling or leaning forward (enthusiasm), and whether they remained engaged until the end of the session (persistence). These behaviors were noted on the observation sheet as absent, emerging, or clearly shown for each classroom session observed, allowing the researcher to compare student behavior during conventional, lecture-based sessions with sessions that used technology-based media.

The collected data were then analyzed using an interactive analysis model adapted from the Miles and Huberman stages as cited by Sugiyono (2022). These stages include data collection, data reduction, data presentation, and concluding. Data reduction was carried out by summarizing, selecting key points from interview transcripts and observation field notes, and discarding irrelevant information. The reduced data were then presented in the form of flowing descriptive narrative text, supplemented by direct quotes from informants. The final step was drawing conclusions, which were initially tentative and would be developed into solid conclusions based on data verification. To ensure data validity, the researcher applied source triangulation techniques (comparing information from teachers, students, and the principal) and technical/method triangulation (matching interview results with field observations), as well as conducting a member check process to validate interview transcripts with informants (Moleong, 2019).

3. RESULTS AND DISCUSSION

Use of Technology-Based Learning Media

Based on data collection conducted during the research period at SDN 2 Sama Guna, researchers found empirical facts regarding the initial conditions and implementation process of the use of technology-based learning media in grade V. In the initial observation on June 22, 2026, it was clearly recorded that although facilities such as smart TVs, projectors, and laptops had been invested in and were physically available at the school, their level of utility in the daily Teaching and Learning Activities (KBM) process had not yet run at optimal capacity. Conventional learning patterns with lecture methods and writing on the blackboard still dominated.

These suboptimal conditions were directly confirmed by the school's policymakers. In an in-depth interview, the principal of SDN 2 Sama Guna, Ms. Maria Astuti, S.Pd., explained the fundamental challenges facing her institution:

"Because the use of technology-based learning media is not yet optimal, many teachers still don't understand how to operate technology-based learning media tools such as laptops, smart TVs, and LCDs. Even though tools to support technology-based learning are already provided at school, such as LCDs in each classroom, smart TVs, and laptops."

The principal's statement underscored the gap between infrastructure availability and the digital competence of human resources. However, as observations progressed in several specific subjects, such as Natural and Social Sciences (IPAS), fifth-grade teacher Mrs. Yeni Agustina, S.Pd., began integrating digital devices. The types of media used in this class focused on visual and audio-visual media, namely PowerPoint (PPT) presentations displayed using an LCD projector, and interactive learning videos played on a large Smart TV placed at the front of the classroom.

Ms. Yeni Agustina explains her strategy in aligning technology tools with pedagogical learning goals in her interview session:

"I usually use a laptop and LCD as tools to display visual media such as learning PPT, and use a smart TV as a tool to display audiovisual media such as learning videos. I choose media that is appropriate to the material; for example, for material that requires concrete examples, I use audiovisual media in the form of learning videos."

The combination of projectors for explaining material points and smart TVs for visualizing dynamic phenomena or concepts appeared to improve classroom management. Projectors allow textual and graphic materials to reach students' entire field of vision. Meanwhile, the high resolution of smart TVs is specifically designed to engage students' five senses (audio and visual simultaneously) when playing simulations or short educational films. This echoes the statement of a student named Dimas, who confirmed that the media they most frequently consume when teachers implement technology are instructional videos and PowerPoint presentations, which he finds more engaging than listening to lectures.

Student Learning Motivation Towards the Use of Technology-Based Media

The direct impact of the transition from conventional to digital methods in the fifth grade of SDN 2 Sama Guna was very evident in the psychological and behavioral aspects of students, namely their learning motivation. Data from observation sheets recorded by researchers showed a contrasting behavioral dichotomy. When learning relied solely on textbooks and oral presentations, many students showed signs of mechanical boredom; they talked to their deskmates, propped their chins up, looked away from the front, and were passive when asked questions. In contrast, once the Smart TV was turned on to play visual educational programs, the entire class's attention was focused on the screen.

This phenomenon of increased attention is reinforced by the confession of the class teacher, Mrs. Yeni Agustina:

"When using technology-based learning media, students' motivation to learn appears to increase compared to using conventional media. This can be seen in the increased student engagement, much more focused attention, enthusiasm, and eagerness to participate in learning due to the attractive presentation."

Analysis based on learning motivation indicators (attention, activeness, interest, enthusiasm, and persistence) showed a very positive trend. First, in the attention and interest indicators, students spontaneously followed the flow of the on-screen presentation without requiring frequent reprimands from the teacher. Second, the activeness and participation indicators appeared to increase. Thanks to video stimulation showing real-life problems or moving images, students were more encouraged to express their opinions and dare to raise their hands. Dimas, one of the students, shared his perspective from a student's perspective:

"I prefer learning using technology. It's easier to understand because there are engaging images and instructional videos. I don't get bored, and I often ask and answer questions during class."

The curiosity fostered by concrete visualizations removes the barrier of abstraction from textbook material. Students become more engaged and stay in their seats until the end of the lesson, as the process of assimilating knowledge feels like a viewing activity that is both entertaining and educational (edutainment).

Supporting and Inhibiting Factors

The implementation of technology-based media cannot be separated from the school ecosystem which involves driving forces and restraining forces.

The main supporting factor is the availability of facilities and infrastructure (hardware). SDN 2 Sama Guna has adequate infrastructure privileges for an elementary school, such as the presence of LCDs in every classroom, laptops, internet network, and Smart TVs. This availability is supported by the commitment of the school leadership (Principal) who continues to motivate educators. Mrs. Maria Astuti explicitly said, 'Teachers are asked to learn about technology-based learning media such as using smart TVs and LCDs in the learning process to make it more interesting.' Another supporting factor that is no less crucial is the high enthusiasm and positive response from students towards new and digital things, which creates an invisible drive for teachers to continue to innovate.

On the other hand, this initiative also faces a number of inhibiting factors. Limited teacher literacy and technical skills are the biggest obstacles. As mentioned by Ms. Yeni Agustina, developing and preparing relevant PPT or video materials takes considerable preparation time. She emphasized:

"Preparing technology-based learning media takes quite a long time, and there are still obstacles such as a lack of knowledge in operating the media, an unstable internet connection, or sometimes problems with the equipment."

Technical constraints such as unstable internet connections can have a significant impact on teachers' planning of live video streaming. These organizational and technical barriers lead to low and inconsistent use of technology in daily teaching and learning routines, thus preventing full institutional optimization.

Discussion

Empirical findings at SDN 2 Sama Guna present a reality that strongly aligns with various theoretical frameworks examining the relationship between technology, learning design, and student psychology. The use of instructional videos and PowerPoint presentations through the integration of projectors and Smart TVs appears to have shifted conventional, one-way (teacher-centered) learning practices toward a more interactive pattern. This provides empirical justification for the views of Arsyad (2019) and Nurfadhillah (2021), who argue that modern learning media not only act as information transmitters but also have the inherent capacity to translate abstract theoretical concepts into visual and audio representations that can be rationally understood by elementary school students.

When learning materials are transferred through multimedia-based instruments, students' cognitive load (cognitive load) for imagining the material is greatly reduced. The fact that the high resolution of a Smart TV can captivate the entire class validates Smaldino's (2018) theory that sensory integration—sight and hearing in sync—increases information retention (memory) and provides a much more meaningful learning context.

Viewed through the lens of motivational psychology, the shift in students' posture from apathy to positive hyperactivity is a concrete manifestation of the fulfillment of intellectual curiosity. As formulated in the motivation indicators by Uno (2007) and Sardiman (2011, 2023), perseverance, a burning curiosity, and a desire to solve problems are the main determinants of intrinsic motivation. Educational displays provided by teachers through technology stimulate students to provide immediate feedback (response). Students are no longer passively waiting to be fed information, but are provoked by video visualizations to ask 'why' and 'how'.

This positive correlation aligns with a series of findings from previous studies. Research by Rahmah and Hadi (2023) and Atika et al. (2025) that formulated interactive media to reduce boredom levels appear to find an echo at SDN 2 Sama Guna, as suggested by student informants. Research by Kalang et al. (2024) regarding the effectiveness of audiovisual media is also broadly consistent with the Smart TV interventions observed in grade V. However, this qualitative study provides a sharper color that the success of technology integration (as reflected in the findings of Agustina et al., 2025) is not a stand-alone entity. Its success is very vulnerable to sabotage by external factors, which in this context are represented by teachers' limited technological competencies (digital divide) and limitations in internet network infrastructure, in line with the

review by the Ministry of Education and Culture (2023). Therefore, the availability of tools must be calibrated with the capacity building of its human resources.

4. CONCLUSION

Based on the qualitative descriptive analysis presented in the results and discussion sections, several fundamental conclusions can be drawn from this study. First, the use of technology-based learning media in the fifth grade of SDN 2 Sama Guna has been implemented through the adaptation of visual and audio-visual media, utilizing PowerPoint presentations, educational videos, LCD projectors, and exploiting the features of Smart TVs. However, the frequency and quality of implementation have not yet reached optimal and consistent levels, due to the high dependence on conventional lecture methodologies.

Second, technology-based media integration appears to have a meaningful influence in boosting student learning motivation. Motivational indicators such as focused attention, increased classroom engagement and participation in discussions, high levels of enthusiasm, and persistence in participating in learning activities all appeared to increase. Multisensory learning can reduce boredom and transform students into reactive and interactive learning agents.

Third, the constellation of technology implementation in the school is supported by factors such as the availability of a sufficient hardware infrastructure ecosystem, policy support interventions from the principal, and students' intrinsic enthusiasm for digital learning. However, on the other hand, this ecosystem is still hampered by crucial factors such as limited digital literacy and technological management skills among teachers, which have implications for minimal innovation in independent interactive content creation, compounded by sporadic technical disruptions such as fluctuations in internet connection stability.

5. BIBLIOGRAPHY

- Aji Silmi, M., et al. (2023). Peran media pembelajaran berbasis teknologi dalam meningkatkan kualitas pendidikan. *Jurnal Pendidikan*.
- Alwi, S. (2017). Problematika guru dalam pengembangan media pembelajaran. *Jurnal Pendidikan*.
- Andrijati, N. (2014). Penerapan media pembelajaran inovatif dalam proses pembelajaran. *Jurnal Pendidikan*.
- Ariaty, N., et al. (2024). Media pembelajaran interaktif berbasis teknologi dan pengaruhnya terhadap motivasi belajar. *Jurnal Pendidikan*.
- Arsyad, A. (2017). *Media pembelajaran*. Jakarta: Rajawali Pers.
- Arsyad, A. (2019). *Media pembelajaran*. Jakarta: Rajawali Pers.
- Atika, N., et al. (2025). Pengaruh media pembelajaran berbasis teknologi terhadap motivasi belajar siswa. *Jurnal Pendidikan*.
- Bawamenewi, A., & Riana, R. (2024). Pemanfaatan media pembelajaran berbasis teknologi dalam meningkatkan motivasi belajar. *Jurnal Pendidikan*.
- Creswell, J. W. (2021). *Research design: Pendekatan metode kualitatif, kuantitatif, dan campuran*. Yogyakarta: Pustaka Pelajar.
- Kalang, R., et al. (2024). Penggunaan media audio visual dalam meningkatkan motivasi belajar siswa. *Jurnal Pendidikan*.
- Kemdikbud. (2022). *Pemanfaatan teknologi dalam pembelajaran*. Jakarta: Kementerian Pendidikan dan Kebudayaan.
- Kemdikbud. (2023). *Transformasi digital pendidikan di Indonesia*. Jakarta: Kementerian Pendidikan dan Kebudayaan.
- Latuny, F., et al. (2024). Pengaruh media pembelajaran digital terhadap motivasi belajar siswa. *Jurnal Pendidikan*.
- Meilinda, R., et al. (2025). Efektivitas penggunaan media pembelajaran berbasis teknologi. *Jurnal Pendidikan*.
- Miarso, Y. (2021). *Menyemai benih teknologi pendidikan*. Jakarta: Kencana.

- Moleong, L. J. (2019). Metodologi penelitian kualitatif. Bandung: Remaja Rosdakarya.
- Moleong, L. J. (2021). Metodologi penelitian kualitatif. Bandung: Remaja Rosdakarya.
- Mulyana, A. (2022). Penggunaan media pembelajaran interaktif untuk meningkatkan motivasi belajar siswa. *Jurnal Pendidikan*.
- Mulyosari, R. (2023). Motivasi belajar siswa dalam pembelajaran abad 21. *Jurnal Pendidikan*.
- Munir. (2019). Pembelajaran digital. Bandung: Alfabeta.
- Nur. (2024). Teknik dokumentasi dalam penelitian pendidikan. *Jurnal Pendidikan*.
- Nurdin, A., & Fauzi, M. (2022). Media pembelajaran berbasis teknologi. *Jurnal Pendidikan*.
- Nurfadhillah, S. (2021). Media pembelajaran. Jakarta: CV Jejak.
- Rahmah, S., & Hadi, M. (2023). Penggunaan media pembelajaran digital dalam meningkatkan motivasi belajar siswa sekolah dasar. *Jurnal Pendidikan*.
- Rahmah, S., Hadi, M., & Widiastari, N. (2024). Media pembelajaran berbasis teknologi dan motivasi belajar siswa. *Jurnal Pendidikan*.
- Sardiman, A. M. (2011). Interaksi dan motivasi belajar mengajar. Jakarta: Rajawali Pers.
- Sardiman, A. M. (2023). Interaksi dan motivasi belajar mengajar. Jakarta: Rajawali Pers.
- Sari, D. (2020). Peran media dalam pembelajaran. *Jurnal Pendidikan*.
- Setiawati, L. (2024). Teknik wawancara dalam penelitian kualitatif. *Jurnal Pendidikan*.
- Slavin, R. E. (2018). Educational psychology: Theory and practice. Boston: Pearson.
- Smaldino, S. E. (2018). Instructional technology and media for learning. New York: Pearson.
- Sugiyono. (2020). Metode penelitian kuantitatif, kualitatif, dan R&D. Bandung: Alfabeta.
- Sugiyono. (2022). Metode penelitian kualitatif. Bandung: Alfabeta.
- Ummah, H. (2019). Motivasi dalam pembelajaran. *Jurnal Pendidikan*.
- Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional. (2003).
- UNESCO. (2020). Education in a digital world. Paris: UNESCO.
- Uno, H. B. (2007). Teori motivasi dan pengukurannya. Jakarta: Bumi Aksara.
- Uno, H. B. (2019). Teori motivasi dan pengukurannya. Jakarta: Bumi Aksara.
- Widiastari, N., et al. (2024). Media pembelajaran berbasis teknologi dalam meningkatkan motivasi belajar siswa. *Jurnal Pendidikan*.