



(MUDIMA)



## Analysis of the Effectiveness Using Learning Media for Elementary School Students

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### ARTICLE INFO

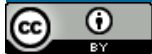
*Keywords:* Learning Media, Effectiveness, Elementary School, Learning Motivation

*Received* : 4 January

*Revised* : 23 February

*Accepted* : 24 March

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### ABSTRACT

This study aims to analyze the effectiveness of learning media use at the elementary school level from the perspective of teachers and students. The main issue raised is the indication of student boredom in the conventional learning process, which affects learning motivation. This study uses a descriptive quantitative approach. Data were collected through questionnaires involving 47 respondents, consisting of 19 teachers and 28 students at SDN and SD Al Husna. The results show that although the use of media is still dominated by conventional tools such as blackboards and textbooks, teachers' perceptions of the effectiveness of media in improving material comprehension are in the very good category. From the students' perspective, the use of learning media had a positive impact on their enthusiasm and confidence in answering questions. In conclusion, learning media is a crucial element in creating a pleasant learning atmosphere, but improvements in facilities and training for teachers are needed to optimize the variety of media used

## **INTRODUCTION**

Primary school education is a crucial phase in individual development, as it is where children's cognitive, affective, and psychomotor foundations begin to be systematically formed (El Zaldie & Hanif, 2025). In the educational ecosystem, learning media has emerged as an essential component that not only functions as an additional tool but also as a strategic instrument to facilitate optimal understanding of the material. Learning media plays an important role as a pedagogical bridge that connects abstract concepts with concrete realities (Rahmadilla & Kholidya, 2025), in line with the characteristics of elementary school students' thinking development, which requires visualization and concrete representation in absorbing information.

Along with the development of information technology, the dichotomy of learning media is now increasingly broad, covering a spectrum that ranges from conventional media such as physical teaching aids and images to digital innovations in the form of interactive videos and multimedia-based educational applications (Eka Nurjanah & Tsatul Mukarromah, 2021). Various studies show that the integration of media that is appropriate and relevant to the characteristics of students can significantly increase the effectiveness of knowledge transfer (Ali et al., 2025). However, on a practical level, the implementation of ideal media still faces various systemic challenges. The gap in access to supporting infrastructure, the limited competence of educators in operating modern media, and the lack of evaluation procedures for the effectiveness of the teaching aids used are the main obstacles in achieving quality learning objectives (Prinanda, 2025).

The urgency of this research is based on the need to build a comprehensive empirical basis regarding the extent to which the use of various types of learning media can have a real impact in elementary school environments. Amidst the dynamics of modern education, learning strategies can no longer rely solely on intuition but must be based on measurable scientific evidence (Ningsih et al., 2025). This study focuses on analyzing the effectiveness of media in improving two fundamental aspects, namely substantive understanding of the material and strengthening students' intrinsic motivation.

Through quantitative and qualitative approaches, this study attempts to dissect the phenomenon of media use in the field to contribute to the development of learning strategies that are more adaptive, contextual, and responsive to students' needs. Based on this background, this study focuses on answering several main questions, including: (1) How effective is the use of learning media in optimizing student understanding in elementary schools? (2) What learning methods are implemented through these media? and (3) To what extent does the use of learning media influence the increase in student learning motivation in the instructional process in the classroom?

## **METHODS**

This study uses a descriptive quantitative approach with qualitative data reinforcement through observation and documentation (Farid Ma'ruf, 2018). The use of this method aims to produce a comprehensive analysis of the implementation of learning media in elementary schools, where statistical data from questionnaires are supported by empirical evidence in the field.

There were 47 subjects in this study, consisting of 19 teachers and 28 students from Al Husna Elementary School. The sample was determined using purposive sampling to obtain data from subjects who actively used learning media in the instructional process. The data collection procedure was carried out through the following stages:

### **1. Survey (Questionnaire)**

Primary quantitative data collection used a questionnaire instrument with a Likert scale. This questionnaire was designed to explore teachers' perceptions of the effectiveness of media and students' psychological responses to motivation and ease of understanding the material (Risanty & Sopiyan, 2017).

### **2. Observation**

The researcher conducted direct observations of interactions in the classroom during the teaching and learning process (Mulyatiningsih, 2020). The focus of the observation was on how teachers integrated media into the material and how students responded spontaneously to the media.

### **3. Documentation**

To reinforce the data, the researcher conducted visual documentation, which included:

- a. Media Documentation  
Taking pictures of the physical learning media used, ranging from conventional media (blackboards, physical teaching aids) to technology-based media.
- b. Activity Documentation  
Visual recording of the classroom atmosphere to capture student engagement and learning dynamics when the media was operated.

### Literature Study

#### Review of Scientific References as a Theoretical Basis to Strengthen the Analysis of Field Findings

Data obtained from questionnaires is then processed using descriptive statistics to identify percentage trends, which are subsequently synchronized with observation notes and visual documentation. This analysis technique ensures that

research findings are based on objective and visually verified data.

## RESULTS AND DISCUSSION

### Respondent Profile Data

This study was conducted to map the effectiveness of the use of learning media in elementary schools, namely SD Al Husna. Respondents in this study consisted of educators (teachers) who acted as media facilitators, as well as sixth-grade students who were the direct beneficiaries of the use of these media. An overview of the distribution of research respondents is presented in Table 1 below.

Table 1. Respondent Profile

No	Respondent Category	Number	Percentage
1	Theacher	19	40,4%
2	Student	28	59,6%
	<b>Number</b>	47	100%

The participation of 19 teachers provided a managerial and evaluative perspective on the constraints and technical effectiveness of media in the classroom. On the other hand, the involvement of 28 sixth-grade students aimed to explore psychological aspects, enthusiasm levels, and ease of understanding the material through the media used. This distribution ensured that the data obtained covered two crucial perspectives in the elementary school education ecosystem.

#### Teacher Perspective Data and Analysis

This study presents the perspectives of 19 teachers at Al Husna Elementary School as the main

facilitators in the learning process. The analysis focuses on the types of media used, the level of perceptual effectiveness, and the technical obstacles encountered in the field.

#### 1) Characteristics of Learning Media Use

Based on the questionnaire results, it was found that the use of learning media by teachers is still dominated by conventional devices, but is beginning to be integrated with visual and digital media

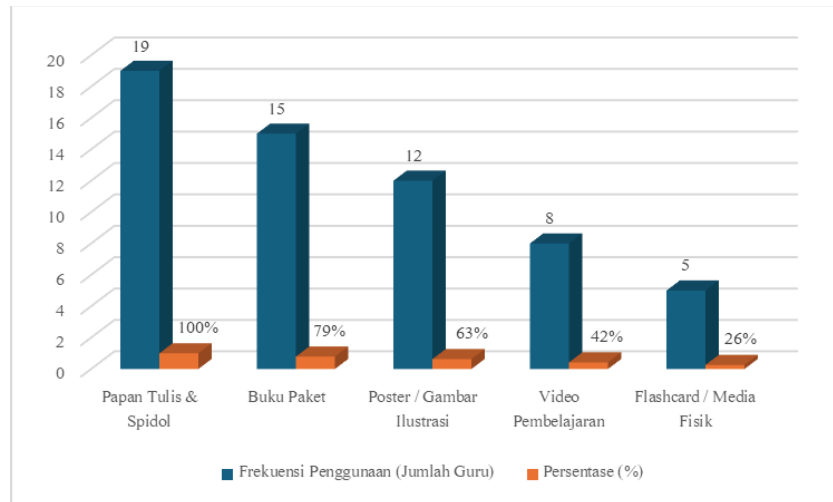


Figure 1. Distribution of Types of Learning Media Used by Teachers (n=19)  
(Source: Nukke Sylvia, 2025)

Based on the data above, it appears that “Whiteboards and Markers” remain the most dominant media used by all teachers. However, the data also shows a positive trend in which the use of these media is combined with other tools. As many as 65% of teachers stated that they had integrated posters or illustrative images, and around 40% had started to use educational videos to clarify abstract concepts. This shows that even though digital infrastructure may be limited, teachers are highly

aware of the need to vary the media used so that learning does not become monotonous (Yusra & Sesmiarni, 2025).

### 1. Teachers' Perceptions of Media Effectiveness

The assessment of learning media effectiveness was carried out through three main dimensions, namely effectiveness in cognitive understanding, increased affective motivation, and observation of students' visual interest.

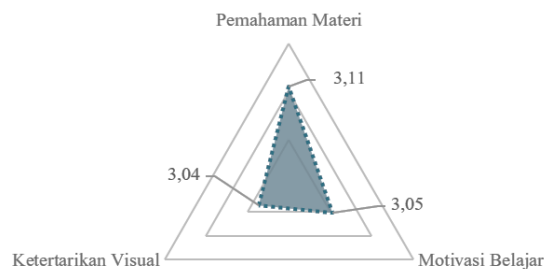


Figure 2. Average Perception of Learning Media Effectiveness by Teachers (n=19)  
(Source: Nukke Sylvia, 2025)

The analysis results show that learning media proved to be effective in the cognitive and affective dimensions with average scores of 3.11 and 3.05, respectively. In the cognitive aspect, the majority of teachers (42%) rated the media as “Very Effective” because it was able to bridge abstract concepts to concrete ones, making the process of explaining the material more efficient. Meanwhile, in the affective aspect, although the distribution was more varied between the categories of very effective to quite

effective, teachers observed that the use of media played a crucial role in reducing student boredom and maintaining the dynamics of enthusiasm for learning in the classroom on an ongoing basis.

Overall, the radar chart visualization shows a stable effectiveness coverage above a score of 3.00, proving that media integration has met educational functionality standards without any negative responses from respondents. This high effectiveness correlates with teachers' initiatives to remain

proactive in designing independent teaching aids amid limited school facilities. This confirms that learning media is an absolute necessity in the learning ecosystem of elementary school students, where its existence becomes an internal motivator for teachers to continue innovating in order to maintain students' focus and understanding (Latipah, 2021).

### Technical Constraints and Development Needs

The results of the study identified a gap between teachers' internal motivation and infrastructure support in schools. The data shows that although

most teachers are highly motivated to create their own media (74%) and actively conduct self-evaluations (84%), these efforts are not supported by ideal school facilities, with 26% of teachers still rating the availability of supporting facilities as poor to non-existent. These physical limitations force educators to rely on personal creativity in modifying conventional teaching aids to compensate for the lack of digital devices in the classroom.

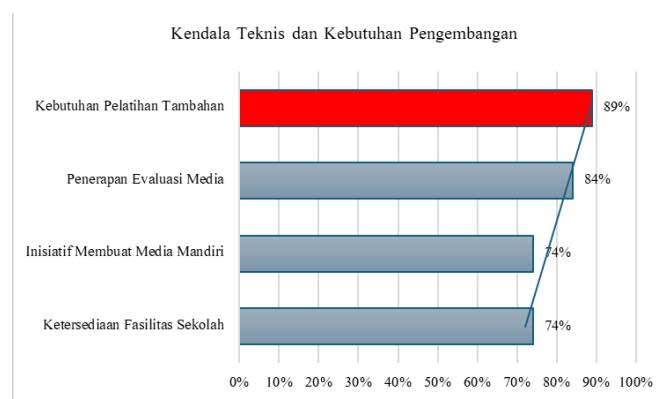


Figure 3. Technical Constraints and Teacher Development Needs  
(Source: Nukke Sylvia, 2025)

This situation is exacerbated by the finding that 89% of teachers explicitly stated an urgent need for additional training related to the development of interactive learning media. This indicates that the high frequency of independent media creation (74%) has not been accompanied by adequate technological mastery, resulting in repetitive media. Therefore, educational development at Al Husna Elementary School can no longer rely solely on the initiative of individual teachers, but requires institutional intervention in the form of the provision of equitable digital facilities and continuous technical

competency improvement programs (Nashrullah et al., 2025).

### Data and Analysis of Responses and Impact on Students

Based on the results of a survey of 28 students regarding the intensity of media use by teachers, a pattern of multimodal media use was found. Data shows that all respondents (100%) still encounter the use of whiteboards and markers as the primary instructional media every day. However, the use of these conventional media has been intensively supported by static visual media such as textbooks (86%) and posters or illustrations (71%).

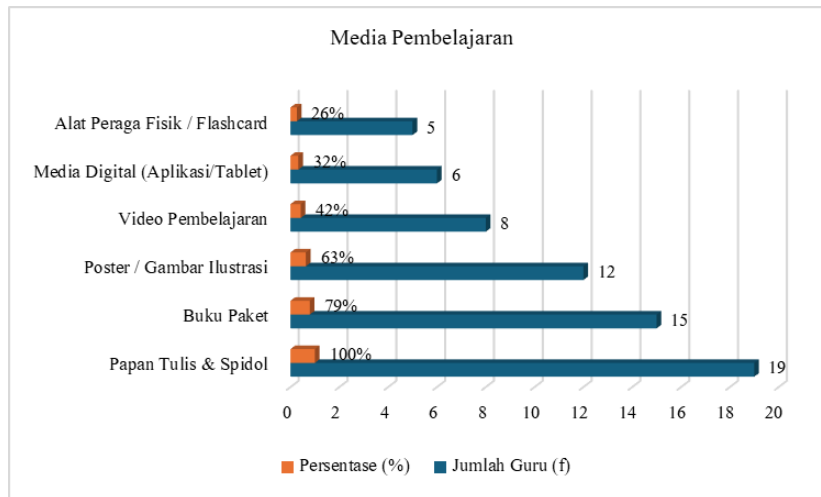


Figure 4. Data and Analysis of Responses and Impact on Students

The integration of technology-based media such as educational videos and digital applications has begun to emerge in the student learning ecosystem, although its frequency has not yet reached that of physical media. As shown in the figure above, the variety of tools used by teachers to accommodate different student learning styles varies. This proves that teachers have made an effort to transition from purely lecture-based methods to visual-based learning, which is consistently confirmed by the alignment of data between teacher reports and direct observation of students in the field (Arsyad et al., 2024).

### 1) Student Preferences for Learning Media

The identity of student preferences shows a strong tendency toward visual and interactive media. Based on the data in the figure below, there are two types of media that are most preferred by students, namely digital media and posters/illustrations, each of which was chosen by 25% of respondents. These findings indicate that elementary school students have a high regard for dynamic visual stimulation. Interestingly, although learning videos ranked third (21.5%), the accumulated preference for technology-based and visual media reached more than 70% of the total student population studied.

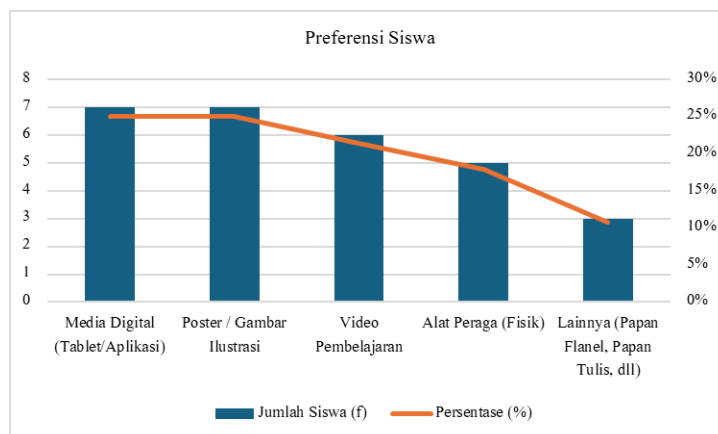


Figure 4. Graph of Elementary School Students' Visual and Interactive Preferences (Source: Nukke Sylvia, 2025)

A significant gap is evident when this preference data is compared with the intensity of media use in the classroom. Although blackboards and markers are used absolutely (100%) by teachers, these media rank lowest in terms of student preference. This indicates a shift in the learning style of the current generation of students, who are more responsive to multimedia content. The preference for digital media and physical teaching aids shows students' desire to be actively involved (hands-on experience) in the learning process. Therefore, the effectiveness of learning in the future will greatly depend on the ability of institutions to adopt media that is in line with students' visual expectations in order to maintain their engagement in the classroom.

### Students' Psychological and Cognitive Responses to Learning Media

The implementation of learning media has a significant impact on the learning atmosphere in the classroom. Based on the results of a survey of 28 students, it was found that 89% of respondents felt that the learning process became more enjoyable when teachers used media. This indicates that learning media successfully performs its function as an affective stimulant that can reduce student boredom. This enthusiasm is also reflected in the students' level of motivation to learn, with 75% of respondents stating that they are more motivated to follow the teacher's instructions when teaching aids or visual media are presented in class

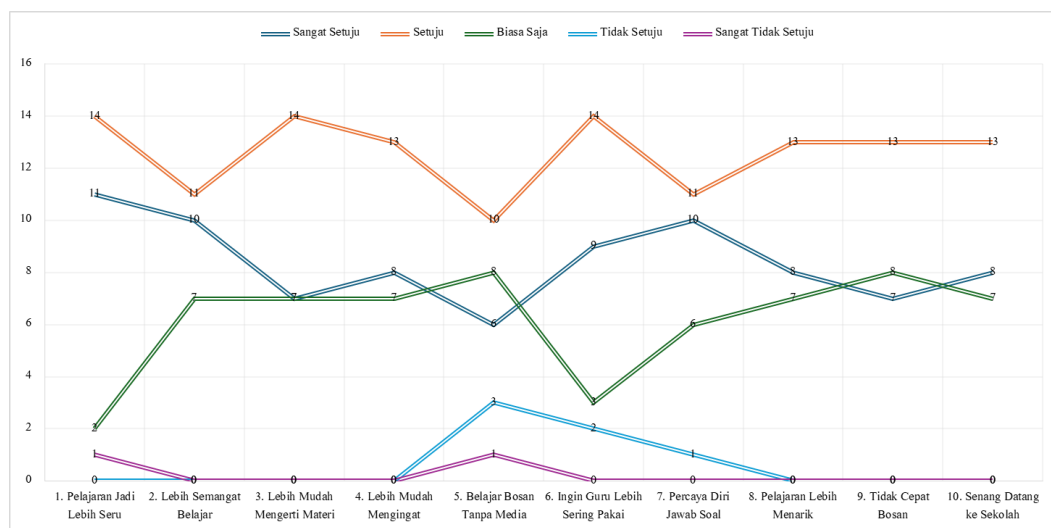


Figure 5. Student Responses to the Learning Media Used  
(Source: Nukke Sylvia, 2025)

In addition to the affective aspect, learning media also contributes significantly to the cognitive dimension of students. As many as 75% of students acknowledged that the use of media greatly helped them understand the lesson content more easily. Interestingly, none of the students (0%) gave a negative response to this aspect of ease of understanding. This finding proves that learning media is effective in simplifying complex material, thereby reducing students' cognitive load and optimally increasing their absorption of the material (Utami et al., 2024).

### Field Observation and Documentation Results

The observation activity conducted at SD Al Husna aimed to validate the questionnaire data through direct observation of classroom interactions and the physical media used. Based on the observation results, it was found that the implementation of learning media in the field had been carried out in accordance with the profile reported by the teacher.

Field documentation shows the use of various media, ranging from static visual media (posters and teaching aids made by teachers) to digital devices in several learning sessions. Qualitatively, the presence

of these media can change the classroom atmosphere to be more dynamic, where students show active learning behaviors such as the courage to ask

questions and higher focus compared to when pure lecture methods are applied.



Figure 6. Field Observation and Documentation Results

Field documentation shows the use of various media, ranging from static visual media (posters and teaching aids made by teachers) to digital devices in several learning sessions. Qualitatively, the presence of these media can change the classroom atmosphere to be more dynamic, where students show active learning behaviors such as the courage to ask questions and higher focus compared to when pure lecture methods are applied. The existence of physical media that is well designed by teachers can cover the gaps in technological limitations, ensuring that knowledge transfer continues to be effective, enjoyable, and student-centered. This visual evidence strongly supports the argument that successful learning at the elementary school level is highly dependent on the ability of teachers to visualize the curriculum into tools that can be accessed by the students' five senses.

## CONCLUSION

This study concludes that the use of learning media has a significant effect on improving instructional quality at the elementary school level, both in cognitive and affective dimensions. Cognitively, media has been proven to bridge the gap between abstract concepts and students' concrete understanding, as indicated by an average

effectiveness score of 3.11. Affectively, the media succeeded in creating a pleasant learning atmosphere for 89% of students and increased learning motivation by 75%. Data synchronization between teachers and students showed that although conventional media still dominated classroom use, there was a strong preference among students for visual and interactive media.

These findings also reveal a gap between teachers' high initiative in designing independent media and the uneven availability of technological facilities in schools. Although learning effectiveness is maintained through teachers' creativity, the need for technical training in interactive media development is an urgent issue recognized by 89% of teacher respondents. This confirms that learning media is not merely an additional tool, but a crucial instrument in the elementary school education ecosystem that plays a role in reducing students' cognitive load and maintaining their emotional engagement throughout the learning process.

Based on the above conclusions, several recommendations are proposed:

### 1. For Educational Institutions

There is a need for standardization and improvement of learning media support facilities, particularly digital devices and

- information technology, to support the transition to more varied and modern learning.
2. For Educators  
Teachers are advised to continue innovating in visualizing teaching materials and participating in interactive media development training programs to meet the visual expectations of digital native students.
  3. For Future Researchers  
Future research can expand the scope of analysis on the direct correlation between the use of certain types of media and the improvement of student learning outcomes (academic scores) quantitatively over a longer period of time.

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