

## Learning Media Development Project Based on Demonstrative Tools

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### ABSTRACT

*The abstract focuses on a "Learning Media Development Project Based on Demonstrative Tools," exploring the development and impact of educational media using demonstrative tools. The study aims to enhance teaching effectiveness through innovative media approaches in education. Qualitative document studies were employed to analyze existing educational practices and assess the integration of demonstrative tools. The research findings highlight the significant role of these tools in improving conceptual understanding and student engagement. By utilizing demonstrative tools, educators can create dynamic learning environments that foster interactive learning experiences. The impact of this approach is evident in its ability to facilitate clearer comprehension of complex concepts and enhance overall educational quality. In conclusion, the research underscores the importance of integrating demonstrative tools into educational practices to meet evolving learning needs and improve educational outcomes effectively.*

**Keywords:** *Demonstrative Tools, Educational Innovation, Learning Media Development*

### ABSTRAK

Abstrak ini berfokus pada "Proyek Pengembangan Media Pembelajaran Berbasis Alat Peraga Demonstratif," yang mengeksplorasi pengembangan dan dampak media pendidikan menggunakan alat peraga demonstratif. Studi ini bertujuan untuk meningkatkan efektivitas pengajaran melalui pendekatan media inovatif dalam pendidikan. Studi dokumentasi kualitatif digunakan untuk menganalisis praktik pendidikan yang ada dan menilai integrasi alat peraga demonstratif. Temuan penelitian menyoroti peran signifikan alat peraga ini dalam meningkatkan pemahaman konseptual dan keterlibatan siswa. Dengan memanfaatkan alat peraga demonstratif, pendidik dapat menciptakan lingkungan belajar yang dinamis yang mendorong pengalaman belajar interaktif. Dampak dari pendekatan ini terlihat dalam kemampuannya untuk memfasilitasi pemahaman yang lebih jelas terhadap konsep-konsep kompleks dan meningkatkan kualitas pendidikan secara keseluruhan. Sebagai kesimpulan, penelitian ini menegaskan pentingnya integrasi alat peraga demonstratif dalam praktik pendidikan untuk memenuhi kebutuhan pembelajaran yang berkembang dan meningkatkan hasil pendidikan secara efektif.

**Kata Kunci:** *Alat Peraga, Inovasi Pendidikan, Pengembangan Media Pembelajaran*

## INTRODUCTION

Education is extremely important for everyone. It provides knowledge and fosters progress, making it essential for humans to seek and discover new things to advance their understanding. To contribute to education, individuals are encouraged to think creatively, generating ideas and suggestions for both formal and non-formal education (Hasbullah, 2011). Education is seen as a conscious human effort (Annisa & Safii, 2023). Therefore, changes and developments in education must align with human culture. These changes should be continuous and sustainable for a better future, as reflected in the first revelation sent by Allah SWT to Prophet Muhammad SAW, Q.S. al-'Alaq (96): 1-5.

إِقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ ١ خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ ٢ إقْرَأْ وَرَبُّكَ الْأَكْرَمُ ٣ الَّذِي عَلَّمَ بِالْقَلَمِ ٤ عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ ٥

The progress of a country is greatly influenced by advancements in education. Formal education

includes elementary schools, junior high schools, senior high schools, and higher education institutions. Quality education requires efforts to improve the standards at all levels. Education is considered of high quality if the learning process is effective and efficient, enabling the achievement of expected competencies. The quality of education is influenced by the availability of learning facilities, the effective use of time, and the impact of effective learning media. Bahar states that 'teachers are obligated to facilitate learning activities that develop students' cognitive, psychomotor, and affective abilities to achieve optimal learning outcomes' (Mudjiono, 2002).

However, achieving the desired national education goals is not easy. The low quality of education is due to ineffective learning methods, which is a major issue in this country. To address this, teachers must have the quality to educate effectively, such as making classroom lessons engaging and interesting for students. Learning activities should provide media that facilitate feedback between teachers and students, fostering meaningful interaction in classroom teaching methods. Based on this, school learning should make students happy and provide the necessary understanding..

Learning activities should not rely solely on common tools and auditory senses, excluding the engaging visual senses, as this approach often leads to unsatisfactory results. Learning outcomes indicate that approximately 75% is achieved through visual senses, around 13% through auditory senses, and about 12% from other senses. This suggests that teachers need to understand the different impacts of learning activities, especially the effectiveness of using visual learning resources or media compared to not using them.

University of Darussalam Gontor uses not only miniature project media to enhance student learning outcomes but also general tools such as teaching aids to boost student creativity. Experts suggest that 'teaching aids are tools used to help teachers demonstrate their teaching material and assist students in their learning process.' By using teaching aids: (1) the teaching and learning process becomes more enjoyable and engaging, which increases students' interest and fosters a positive attitude towards the material; (2) the material concepts are presented concretely, making them easier to understand and grasp, and thus more effectively instilled.

Based on the explanation above, the quality of education will be more efficient if teachers and students can improve their learning process. A teacher's task is to create a lively classroom atmosphere where students are more active in learning. The current curriculum, known as the 2013 curriculum, places students at the center of learning, with teachers acting as facilitators. Therefore, teachers must create a classroom environment where students are more active. One way to achieve this is by using media during the learning process. This media will help clarify the material the teacher will teach.

Learning media are tools that assist educators in the classroom, making it easier to focus on the material being taught and helping students quickly understand the lessons (Puspitarini & Hanif, 2019). Learning media will enhance the quality of student learning, enabling the desired goals to be achieved with maximum results. Based on the general definition of media, a specific definition of learning media can be constructed. Learning media can be defined as anything that can be used to deliver or convey material from the teacher in a planned manner so that students can learn effectively and efficiently (Arsyad Azhar, 2006). These tools must stimulate students' thoughts, feelings, attention, and skills, thus encouraging the learning process. More specifically, learning media can include materials, tools, or techniques used in teaching and learning activities to facilitate scientific, interactive, effective, and efficient educational communication between teachers and students.

## METHODS

The research employs a qualitative document study approach to investigate the development of learning media based on demonstrative tools (Sugiyono, 2013). The research design involves a systematic review and analysis of existing documents related to educational innovations and the use of demonstrative tools in learning environments. Documents such as academic papers, reports, curriculum guidelines, and educational policies will be reviewed to gather insights into current practices, challenges, and potential improvements in learning media development (AlYahmady & Alabri, 2013). This approach allows the researcher to explore various perspectives and experiences documented in the literature regarding the effectiveness and implementation of demonstrative tools in educational settings.

Data collection techniques will involve comprehensive document retrieval from academic databases, educational institution websites, and relevant governmental publications. These documents will be carefully selected based on their relevance to the study's focus on learning media development and the use of demonstrative tools. Data analysis will employ thematic analysis, where patterns, themes, and recurring ideas regarding the development, implementation, and impact of learning media will be identified and synthesized (Mack & Woodson, 2005). This methodological approach aims to provide a nuanced understanding of how demonstrative tools are integrated into educational practices, the challenges encountered, and the potential benefits observed, thereby contributing to the enhancement of educational strategies and pedagogical approaches.

## RESULT AND DISCUSSION

### Learning Media

#### a. Definition of Media

The word "media" comes from Latin, the plural form of the word "medium," which literally means intermediary or transmitter. According to Russell, media are channels of communication that serve as intermediaries between the source of the message and the receiver. According to Gagne, media are components in the student's environment that can stimulate them to learn. Azhar (Media Pembelajaran, 2006) states that media are generally understood as graphic, photographic, or electronic tools used to capture, process, and rearrange visual or verbal information. From this perspective, it can be concluded that media are communication components that function as intermediaries or carriers of messages from the sender to the receiver. Media are anything that can be used to convey messages (R Andi Ahmad, 2019) from the sender, in this case, the educator, to the receiver, namely the students, thereby stimulating their thoughts, feelings, interest, and attention in such a way that the learning process occurs.

The media has been crucial in advancing civilization, particularly technology and science. Furthermore, individuals can communicate more effectively than ever through virtual or online live interactions in the contemporary communication era. Modern humans can communicate, share knowledge, and build connections with people from diverse cultures throughout the globe. Media in any learning, including Arabic language learning, is essential; what would happen in the learning given by the teacher without the media used? Of course, students would feel bored and less than optimal (Ahyar, 2025).

#### b. Benefits and Function of Learning Media

(Nana Sudjana, 1992) outlines the benefits of learning media in the student learning process as follows:

1. Learning will attract more student attention, thereby fostering motivation to learn.

2. Learning material will be clearer in meaning, making it easier for students to understand, enabling them to master and achieve learning objectives.
3. Teaching methods will be more varied, not solely relying on verbal communication through the teacher's words, preventing student boredom and conserving the teacher's energy, especially when teaching every class period.
4. Students can engage in more learning activities because they are not just listening to the teacher's explanations but also performing other activities such as observing, demonstrating, exhibiting, etc.

In the interaction between students and their environment, the function of media can be understood based on its advantages and the potential obstacles that may arise in the learning process. The three advantages of media capabilities (Daryanto, 2011) are as follows:

1. Fixative capability, meaning it can capture, store, and reproduce an object or event. With this capability, objects or events can be drawn, photographed, recorded, filmed, stored, and shown or observed again as originally.
2. Manipulative capability, meaning media can reproduce objects or events with various modifications (manipulations) as needed, such as changing their size, speed, or color, and the presentation can be repeated.
3. Distributive capability, meaning media can reach a large audience in a single presentation simultaneously, such as TV or radio broadcasts.

#### **c. Project for Developing Learning Media Based on Demonstrative Tools**

The Project for Developing Learning Media Based on Demonstrative Tools is an initiative aimed at designing, developing, and producing demonstrative tools or learning media for educational contexts. These learning media are designed to facilitate the learning process by providing visualizations, demonstrations, or direct experiences for students (Ramli, 2017). The demonstrative tools in this project can be of various types, both physical and digital, specifically designed to help students understand difficult or abstract concepts (Rafiqah, 2014). The development of learning media based on demonstrative tools may involve several stages, including planning, design, production, testing, evaluation, and training users (teachers or instructors) on how to integrate these tools into the learning process.

The main goal of this project is to enhance the quality of learning, facilitate better understanding, and create a more interactive and enjoyable learning experience for students. Additionally, this project can assist teachers or instructors in providing more effective and varied teaching. The development of learning media based on demonstrative tools can involve various resources, technologies, and collaborations between learning media developers, teachers, and education experts to create tools that meet the learning needs and educational context.

#### **d. Advantages of Demonstrative-Based Learning Media**

Demonstrative-based learning media have several advantages that can enhance effectiveness and efficiency in the learning process. Here are some key advantages of using demonstrative tools in education (Aminoto et al., 2019):

1. Demonstrative tools enable complex or abstract concepts to be more easily understood. Visualization helps students process information better than just listening to verbal explanations.
2. Some demonstrative tools can be designed to be interactive, allowing students to actively participate in learning. This stimulates engagement and motivation to learn.

3. Demonstrative tools can assist students in testing their own understanding by involving them directly in experiments or demonstrations.
4. Using demonstrative tools can make the classroom atmosphere more engaging and motivating for students. This helps create a more enjoyable learning environment and reduces boredom.

By leveraging these advantages, the use of demonstrative-based learning media can help improve the quality of education and teaching, as well as enrich students' learning experiences.

#### **e. Disadvantages of Demonstrative-Based Learning Media**

Although demonstrative-based learning media have many advantages, they also have several disadvantages and challenges that need to be considered:

1. Developing, purchasing, or maintaining demonstrative tools often requires substantial costs. Special materials, software, and hardware can be expensive, and schools or educational institutions may need to allocate special budgets.
2. Physical demonstrative tools require proper maintenance. They can break or wear out and may require replacement or repair, which also incurs additional costs.
3. Schools or educational institutions may not have sufficient resources to develop or acquire effective demonstrative tools. This can create disparities in the accessibility of quality learning media.
4. Despite these disadvantages and challenges, the use of demonstrative-based learning media can still provide significant benefits in enhancing the learning experience (Ekayani, 2017). The key is to plan carefully, consider limitations, and maximize the advantages of demonstrative tools to achieve desired learning goals.

#### **f. Benefits of Demonstrative-Based Learning Media**

##### **a. Benefits for Teachers**

Demonstrative-based learning media provide many benefits for teachers in their teaching process. Here are some key benefits that demonstrative tools can offer in education:

Demonstrative tools allow teachers to explain complex or abstract concepts more effectively. This helps students better understand the material, thereby improving teaching effectiveness (Gupitasari et al., 2019). Some concepts or topics may be difficult to explain with words alone. Demonstrative tools can be an effective way to overcome these obstacles and make teaching more efficient. Interactive and engaging demonstrative tools can enhance student engagement in learning. This makes teaching more dynamic and enjoyable. The use of demonstrative tools enables teachers to design more creative and unique learning experiences. They can create demonstrations, experiments, or activities that involve students directly. Demonstrative tools also help teachers provide visual or practical evidence that supports lesson content. This helps students understand these concepts better.

##### **b. Benefits for Students**

Demonstrative-based learning media is a teaching method that utilizes various demonstrative tools or physical media to help students understand the concepts being taught. The benefits of demonstrative-based learning media for students are diverse, including:

Demonstrative tools help students visualize the taught concepts in a more concrete and understandable way. This aids students in internalizing information more effectively. Enhanced Engagement: The use of demonstrative tools in learning makes the learning process more engaging and interactive. Students are more likely to be involved and active in the learning process. Visual Learning Facilitation: Students have various learning styles, and demonstrative-

based learning media facilitates students who prefer visual learning. This can help students remember information better.

Support for Active Learning: By using demonstrative tools, students can conduct their own experiments, observations, or demonstrations. This allows them to learn in a more active and practical manner (Hartati, 2010). By using demonstrative-based learning media, teachers can create a more engaging, varied, and effective learning environment for students. This helps students better understand concepts and prepares them to face more complex learning challenges.

## CONCLUSION

In this article, it can be concluded that education plays a crucial role in advancing knowledge and progress, and it must continually adapt to cultural and technological changes. The development of a country heavily depends on progress in education. Formal education, such as schools and universities, should focus on enhancing the quality of learning by utilizing learning media, including demonstrative-based media. Demonstrative-based learning media offer significant benefits for both teachers and students. For teachers, these media assist in explaining concepts more effectively, enhancing creativity in teaching, and facilitating more interactive learning environments. For students, these media help visualize concepts, increase engagement, and support active learning. However, the use of learning media also presents challenges, such as the cost of development and maintenance of demonstrative tools. Yet, with proper planning, the benefits of demonstrative-based learning media can enhance the quality of education and teaching. Therefore, the integration of demonstrative-based learning media should be a critical component in efforts to improve the quality of education at all levels.

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