



Utilization of YouTube to Improve Learning Outcomes in Madrasah

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Received: 15 July 2024

Revised: 4 September 2024

Accepted: 15 September 2024

Abstrak

Penelitian ini berfokus pada penggunaan YouTube sebagai platform pembelajaran untuk meningkatkan hasil belajar siswa di Madrasah. Tujuan utama penelitian ini adalah untuk mengevaluasi efektivitas video pembelajaran interaktif dalam memperdalam pemahaman siswa terhadap materi pelajaran, serta untuk mengidentifikasi tantangan dan peluang dalam integrasi teknologi ini dalam kurikulum pendidikan Islam. Metode penelitian yang digunakan adalah metode kualitatif dengan pendekatan studi kasus, melibatkan observasi langsung, wawancara mendalam dengan guru dan siswa, serta analisis dokumen terkait. Hasil penelitian menunjukkan bahwa penggunaan YouTube sebagai alat bantu pembelajaran dapat meningkatkan keterlibatan dan motivasi belajar siswa. Video pembelajaran yang disajikan secara interaktif membantu siswa lebih memahami konsep-konsep pelajaran dengan lebih baik, sejalan dengan teori konstruktivisme. Implikasi penelitian ini menekankan pentingnya pengembangan keterampilan teknologi bagi guru dan integrasi yang lebih sistematis dari platform digital dalam kurikulum pendidikan Islam untuk mendukung pembelajaran yang lebih efektif dan relevan. Penelitian ini memberikan kontribusi signifikan dalam literatur pendidikan digital, khususnya dalam konteks pendidikan agama, serta membuka peluang untuk penelitian lanjutan yang lebih komprehensif.

Kata Kunci: YouTube, pendidikan Islam, pembelajaran interaktif

Abstract

This research focuses on using YouTube as a learning platform to improve student learning outcomes in Madrasah. The main aim of this research is to evaluate the effectiveness of interactive learning videos in deepening students' understanding of the subject matter and identify challenges and opportunities in integrating this technology into the Islamic education curriculum. The research method used is a qualitative case study involving direct observation, in-depth interviews with five teachers and 2 students, and analysis of related documents. The research results show that using YouTube as a learning aid can increase student engagement and learning motivation. Learning videos presented interactively help students understand lesson concepts better, which is in line with constructivism theory. The implications of this research emphasize the importance of developing technological skills for teachers and more systematic integration of digital platforms in the Islamic education curriculum to support more effective and relevant learning. This research made a significant contribution to the literature on digital education, particularly in the context of religious education, and opens up opportunities for more comprehensive further research.

Keywords: YouTube, Islamic Education, Interactive Learning

How to cite: Boiman, Fanani, A.A. & Mashuri, I. (2024). Utilization of YouTube to Improve Learning Outcomes in Madrasah. *Journal of Nusantara Education*, 4(1), 38-45.

Introduction

The use of technology in education, especially through the YouTube platform, has been a major concern in recent years (Frag et al., 2020; Pratama et al., 2020). This phenomenon reflects the adaptation to the demands of the times in today's digital era, where technology plays an important role in expanding access to learning resources and changing the way students interact with subject matter (Ngoasong, 2022; Pinto et al., 2022; Núñez-Canal et al., 2022). In the context of Madrasah education, the integration of YouTube as a learning tool promises significant improvements in the quality of education by utilizing digital media to achieve the goal of a more inclusive Islamic education (Memon et al., 2021; Chohan & Hu, 2022; Norman et al., 2024).

The use of YouTube in the context of Madrasah education offers a variety of benefits, ranging from easy access to information to support in collaborative learning (Salam & Farooq, 2020; Mora et al., 2020; Qureshi et al., 2023; Ansori et al., 2023). The importance of active interaction of students with learning content to deepen their understanding of lesson concepts (Voon et al., 2020; Erciyas, 2020; Hasanah et al., 2023). In line with this theory, the use of YouTube not only introduces students to a variety of more engaging learning methods but also prepares them for the increasingly complex challenges of 21st-century education.

Despite the great potential offered by YouTube in improving learning outcomes in Madrasas, there are still some challenges that need to be overcome. One of the main issues is the consistent integration of this technology in the existing curriculum and the acceptance of all relevant parties, including teachers, students, and school administration. Another problem is the need for teacher skill development in utilizing technology as an effective tool in the learning process. This requires an in-depth increase in pedagogical competence to maximize YouTube's potential to create an effective and inclusive learning environment in Madrasas.

Previous research studies have shown that technology integration, especially the use of YouTube as a learning platform, has a significant positive impact on education. Leelawong and Biswas (2020) observed that interactive learning videos on YouTube can improve students' information retention and facilitate more active

learning, in accordance with constructivism theory (Piaget, 1970). Research by Li and Lalani (2020) highlights the importance of technology in supporting collaborative and project-based learning, relevant for implementation in Madrasas. Wibowo (2020) added that the use of YouTube not only enriches the learning experience but also helps overcome limited access to learning materials. Nonetheless, the remaining research gap is the need for a more in-depth study of the effective implementation of YouTube in the context of Islamic education, particularly in Madrasas, to optimize its use and improve overall learning outcomes.

While there have been studies that have revealed the benefits of YouTube in the context of education, there are research gaps that need to be explored further. The research gap that emerged was the lack of focus on the implementation of YouTube in Madrasah which specifically integrates Islamic educational values with digital learning methods. In-depth studies on how YouTube can be customized to meet the needs of Islamic education in Madrasah are still limited, so more in-depth research is needed to fill this gap.

The novelty of this research lies in its holistic approach to the use of YouTube in the context of Madrasas, with a focus on the integration of Islamic educational values and the development of teachers' pedagogical skills. This research will also explore effective implementation strategies to address infrastructure challenges and public acceptance of technology in education. Thus, this research will not only fill the existing knowledge gap but also provide practical guidance for educational institutions to maximize the potential of technology in improving the quality of Islamic education.

The main purpose of this study is to investigate the implementation of YouTube in Madrasah education to improve student learning outcomes holistically. This research will focus on developing innovative and sustainable learning models that combine religious values with digital technology. Thus, it is hoped that the results of this study can make a significant contribution to the development of curriculum and educational practices in Madrasah that are adaptive to the demands of the times.

Method

The research methods used in this study include the type of research, research approach, data collection technique, and data analysis technique selected to ensure the accuracy and success of the research. This research uses a qualitative approach with a focus on case studies, which allows us to delve into the subject's experience and perception of the use of YouTube technology in Madrasah learning. This approach was chosen to gain an in-depth understanding of the impact of YouTube use in the context of Islamic education in Madrasah (Priya, 2021).

The data collection techniques used in this study include in-depth interviews with Madrasah teachers who have integrated YouTube into their teaching and participatory observation of the learning process involving this multimedia technology. In-depth interviews provide insight into teachers' perspectives and practical experiences in facing challenges and successes when using YouTube as a learning tool, while participatory observation allows researchers to understand the context directly in the classroom (Adeoye-Olatunde & Olenik, 2021).

Data analysis was carried out using the Miles and Huberman data analysis approach, which is well-known in qualitative research. Where this analysis technique is data analysis during data collection brings researchers to think about existing data and develop strategies to collect new data (Mezmir, 2020). This approach makes it possible to systematically compile relevant findings, as well as provide a solid basis for concluding research results by considering the various perspectives involved in the use of multimedia technology in Madrasah.

Results and Discussion

This study aims to investigate the influence of YouTube use on learning outcomes in Madrasah, focusing on four main aspects: the use of interactive learning videos, the support of teaching materials, the accessibility and flexibility of learning, and collaboration and project-based learning. The research method used is qualitative by collecting data through in-depth interviews with Madrasah teachers and students in several regions in Indonesia.

Use of Interactive Learning Videos

The use of interactive learning videos, such as those provided by the YouTube platform,

not only reflects the application of constructivist theory in education but also illustrates a significant transformation in contemporary learning methods (Chuanchen, 2023). This theory emphasizes the importance of students' active interaction with learning content to build a deep understanding. By utilizing video technology, Madrasah is able to facilitate more dynamic learning and prepare students to face the educational challenges of the 21st century.



Figure 1. Constructivism Theory

The explanation presented above is strengthened by the findings in the panel through interviews conducted. In an interview with an Arabic teacher in one of the Madrasas, it was conveyed that,

"The use of interactive learning videos from YouTube helps me illustrate the concepts of tajweed and interpretation of the Qur'an visually and more engaging for students (I_Gr_2024)."

On the contrary, the results of an interview with the head of the Madrasah where he said that, "Our teachers prefer to use learning videos from YouTube rather than using printed materials, because it is easier to adapt to the needs of students and helps them understand better (I_KS_2024)."

Teaching Material Supporters

Teaching material support, in the context of using YouTube as a learning resource, involves the integration of various multimedia resources to enrich the student learning experience. The platform offers broad access to learning videos that cover a wide range of disciplines, from science experiments to history presentations, which cannot always be easily replicated in a traditional classroom setting. The use of video as a supporting tool for teaching

materials not only facilitates the understanding of complex concepts but also increases students' interest in the subject matter being taught, in accordance with the theory of multimedia learning which emphasizes that the combination of visual and audio can strengthen information retention and learning motivation.

Interviews with several teachers show that YouTube provides extensive access to a wide range of teaching materials that support the Madrasah curriculum. From the interview activities conducted to science teachers, it was stated,

"I often use YouTube videos to show science experiments and natural phenomena that are difficult to replicate in the classroom (I_Gr_2024)."

On the other hand, according to an interview with a student, "I find it easier to understand a math lesson by watching tutorials on YouTube than just listening to explanations from the teacher in class (I_S_2024)."

In the context of the use of YouTube in Madrasah education, the results of an interview with a teacher who actively uses this platform to show science experiments and natural phenomena that are difficult to replicate in the classroom show a strong integration between technological knowledge (T), pedagogical knowledge (P), and knowledge of lesson content (C) in accordance with the TPACK theory (Kaliappen et al., 2021). This approach allows teachers to visually convey complex concepts to students, improving their understanding of science learning. Meanwhile, the positive response of a student who prefers math tutorials on YouTube rather than direct explanations from teachers shows that students can take advantage of digital resources for independent learning, supporting learning adaptation according to individual needs. The integration of YouTube in education not only enriches the learning experience but also encourages more effective learning differentiation, following the TPACK principle of integrating technology with appropriate teaching strategies and learning content.

Learning Accessibility and Flexibility

In the context of Madrasah education, YouTube has become an important means to improve accessibility and flexibility of learning for students. The platform allows students to

access a variety of learning resources such as videos, tutorials, and science experiments outside of class hours independently. This reflects the adoption of technology that allows learning anywhere and anytime according to the individual needs of students, which can increase their independence in deepening their understanding of the concepts taught in the classroom.

Madrasah teachers observed that YouTube provides wide accessibility to learning resources, allowing students to learn anytime and anywhere according to their needs.

One teacher said, "Our students often access YouTube videos outside of class hours to prepare themselves for exams or deepen their understanding of a particular topic (I_S_2024)."

From a student's point of view, "I often watch learning videos on YouTube when there are questions or concepts that are difficult to understand from the explanations in class (I_S_2024)."

The results of this interview highlight that the accessibility provided by YouTube allows students to choose a time and place to study that suits their own learning style. In the observation activities carried out at the school, it was found that the accessibility and flexibility of student learning as described in the table below:

Table 1. Student Learning Accessibility and Flexibility

Access Time (Hours)	Types of Content Accessed	Number of Accesses /Day	Comments/Students
Morning (07:00 - 12:00)	Math Tutorials	50	10
Afternoon (12:00 - 15:00)	Experiments Sains	30	5
Afternoon (15:00 - 18:00)	Group Presentations	40	8

Evening (18:00 - 22:00)	General Learning Videos	60	12
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The table illustrates the pattern of access time and the type of content accessed by students in a day. In the morning, math tutorials are the main content with a total of 50 accesses and an average of 10 comments per student, indicating a focus on a more formal understanding of the material at the beginning of the day. The day is dedicated to science experiments with 30 accesses and 5 comments per student, highlighting practical and exploratory learning activities. In the afternoon, group presentations received attention with 40 accesses and 8 comments per student, demonstrating intensive collaborative activity in the afternoon hours. The evening culminated in a general learning video with 60 accesses and 12 comments per student, signaling the use of YouTube to broaden general understanding beyond the material taught in schools. This pattern reflects the flexibility of students in accessing learning resources according to their time and needs throughout the day.

Collaboration and Project-Based Learning

Collaboration and project-based learning using YouTube have become an effective strategy in the context of Madrasah education. Through this platform, students can collaborate on creating group presentation videos on specific topics and upload them to share with friends as well as teachers. This approach not only facilitates intensive collaborative learning but also develops students' presentation and communication skills. Thus, YouTube is not only a digital learning tool, but also encourages the development of important social and academic skills for students in Madrasah settings.

In the interviews with students, it was shown that YouTube facilitates collaboration between students in project-based learning. A number of students revealed,

"We often make group presentation videos on certain topics and upload them to YouTube to share with friends and (I_S_2024) teachers."

One teacher added, "I saw an increase in students' enthusiasm for learning when they knew that they were going to create

and upload videos on YouTube (I_Gr_2024)."

The principal also stated, "The use of YouTube in collaborative projects has increased student engagement and made them more responsible for their own learning (I_Pr_2024)."

Another teacher noted, "These videos not only help students understand the material, but also teach them important skills such as teamwork and creative thinking (I_Gr_2024)."

The results of the interviews showed that the use of YouTube as a learning tool in collaborative projects had a significant positive impact on Madrasahs. Students often create group presentation videos on specific topics and upload them to YouTube, improving their understanding of the material and motivation to learn. Teachers noted an increase in student enthusiasm as well as the ability to work in a team and think creatively. The principal added that the use of YouTube makes students more responsible for their own learning. In the observation activities carried out at the school, data on the positive impact of project-based learning was also found.

Table 2. The Positive Impact of Project-Based Learning

NO	Key findings
1	Students create group presentation videos
2	Increased student enthusiasm
3	Student responsibility for self-learning
4	Teaching cooperation and creativity skills

The findings from the use of YouTube in the context of Madrasah education show various significant positive impacts. First, students' participation in the creation of group presentation videos has improved their understanding of the subject matter and encouraged active involvement in the learning process. This not only strengthens the understanding of concepts, but also develops students' ability to effectively convey ideas to friends and teachers. In addition, the use of YouTube has also succeeded in increasing students' enthusiasm for learning by providing relevant and engaging content, such as math tutorials or science experiments, that can be accessed as per their needs throughout the day.

This contributes to higher motivation for learning and independent exploration of hard-to-understand material. Further, this approach also gives students greater responsibility for their own learning, encouraging independence and initiative in developing academic and non-academic competencies such as teamwork and creativity. Thus, YouTube not only functions as a digital learning tool but also as an effective means to develop students' potential holistically in the Madrasah environment. Based on the results of the research conducted, the use of YouTube in Madrasah education has been proven to have a significant positive impact on the learning process. The integration of interactive learning videos from YouTube not only reflects the application of constructivism theory in education, but also illustrates an important transformation in contemporary learning methods. This is in line with the findings of previous research which showed that the use of multimedia technology in learning can increase student engagement, deepen concept understanding, and increase learning motivation (Misbah et al., 2020; Kurniawan & Suherman, 2020; Yusuf & Zhang, 2020). In addition, YouTube provides broad access to a wide range of learning materials that support the Madrasah curriculum, increasing the flexibility and accessibility of student learning outside of formal lesson hours. In the context of TPACK (Technological Pedagogical Content Knowledge), the integration of video technology from YouTube allows teachers to convey complex concepts visually, increasing the effectiveness of teaching in preparing students for the challenges of 21st century education (Koehler & Mishra, 2009). Thus, the application of YouTube in Madrasah education not only enriches the learning experience but also supports the development of social and academic skills that are important for students.

The contribution of this research is important in the context of the development of Madrasah education, especially in utilizing YouTube technology as an effective learning tool. These findings not only illustrate that the integration of learning videos from YouTube can improve the quality of learning in Madrasahs, but also provides an empirical foundation for the development of learning strategies based on

multimedia technology. Practically, the results of this study provide recommendations to education policymakers to further expand and support the use of YouTube as an integrated learning resource in the Madrasah curriculum. Theoretically, this research also complements the literature that shows how important technological knowledge, pedagogy, and content are to create meaningful and effective learning experiences. Thus, this research not only has the potential to improve the quality of Madrasah education in general but also contributes to the educational literature on the effectiveness of the use of multimedia technology in improving student learning outcomes.

Conclusion

The most important findings of this study show that the use of YouTube as a learning platform in Madrasah has great potential to improve student learning outcomes. Through interactive learning videos, students can better understand the subject matter in depth and actively. The lesson obtained from this study is the importance of adapting to technology in Islamic education to support learning that is more effective and relevant to the demands of the times. This study also emphasizes that the success of technology integration in education does not only depend on infrastructure but also on the pedagogical competence of teachers which needs to be continuously developed.

The main strength of this paper lies in its scientific contribution, which is to renew the perspective on the use of technology in Islamic education. This research not only offers a new view of learning methods but also introduces important variables such as interactivity and accessibility that can improve the quality of learning. However, the limitations of this study lie in the limited scope of one location and type of educational institution. In addition, variables such as gender and age are not discussed in depth. Therefore, further research is needed that accommodates these variables, including more comprehensive survey methods, to get a more comprehensive picture and can be used as a basis for more effective and targeted education policies.

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