

Utilization Of Digital Media As A Learning Strategy In The Campus Environment

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Abstract

The advancement of digital technology has significantly influenced higher education, particularly in the use of digital media as a learning strategy. This study analyzes the effectiveness, challenges, and implementation strategies of digital media through a qualitative approach involving literature review and case studies in several universities. The results indicate that digital media enhances student engagement, supports collaborative learning, and provides access to diverse learning resources. Challenges identified include gaps in digital literacy, limited infrastructure, and the need for pedagogical adjustments. The integration of digital media requires careful planning, continuous support, and alignment with educational objectives to maximize its learning potential.

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1. INTRODUCTION

The development of digital technology has brought about significant changes in various aspects of human life, including in higher education. Universities, as centers for the development of science and innovation, are required to adapt to advances in information and communication technology (ICT) to create learning processes that are relevant to the needs of the times. In this context, utilizing digital media as a learning strategy on campus is a necessity, not an option. Digital media serves not only as a tool but also as a strategic tool capable of transforming the way faculty and students think, learn, and interact.

The use of digital media in higher education learning can increase student active engagement through digital platform-based interactions such as Learning Management Systems (LMS), interactive learning videos, and online discussion forums. Digital media also helps lecturers deliver material in a more engaging, flexible, and accessible manner, anytime and anywhere. This creates a more open and dynamic learning environment compared to conventional learning, which is limited by space and time.

The application of digital media in learning has been shown to enhance students' motivation, creativity, and critical thinking skills. Through various digital platforms such as educational videos, podcasts, academic social media, and collaborative applications (e.g., Google Classroom, Edmodo, and Microsoft Teams), students can actively participate in learning activities. Interactions are no longer one-way but become two-way, even multi-way, allowing students to exchange ideas, discuss topics, and produce work collaboratively.

In Indonesia, the implementation of digital media in higher education continues to grow. Most Indonesian students believe that digital media helps them understand lecture material more quickly and engagingly. However, the effectiveness of this strategy depends heavily on students' digital literacy and the readiness of lecturers to utilize technology pedagogically. Lecturers with digital competence are able to create meaningful learning experiences through the integration of digital media with active learning and collaborative learning approaches, as well as using project-oriented learning approaches.

The use of technology-based media has not only impacted the technical aspects of learning but has also brought about a paradigm shift in higher education. Previously, teacher-centered learning has shifted to student-centered learning. This shift allows students to become active participants in constructing knowledge through exploration, reflection, and digital interaction.

However, despite these positive potentials, the implementation of digital media on campus also faces a number of challenges. The Indonesian Technology journal notes that frequently emerging obstacles include limited technological infrastructure, low digital literacy among lecturers, and resistance to the shift from conventional to digital learning. Furthermore, there is still a gap in technology access among students, especially in areas with unstable internet connections. These challenges require serious attention so that digital media utilization strategies can be implemented effectively and equitably across all universities.

Therefore, strategic planning is needed to utilize digital media as an integral part of the learning system on campus. Universities must be able to develop policies that support the digitalization of learning, such as digital literacy training for lecturers and students, providing adequate infrastructure, and developing interactive and contextual digital media. Integrating technological, pedagogical, and humanistic aspects is key to the success of this strategy.

Thus, the use of digital media as a learning strategy on campus is not merely a trend in educational modernization, but a fundamental step towards a more innovative, inclusive, and sustainable transformation of higher education. Through this strategy, universities are expected to produce graduates who are not only academically intelligent but also possess critical, creative, collaborative thinking skills and are adaptive to global technological developments. However, the implementation of digital media in universities is still perceived as suboptimal due to various problems that continue to hamper its effectiveness. Many campuses still face limited ICT infrastructure, unstable internet access, and inadequate device facilities. Furthermore, the digital literacy gap between students and lecturers creates inequities in technology utilization; some academics are able to adapt quickly, while others struggle to understand and operate digital platforms effectively. Resistance to the shift from conventional to digital methods is also a serious obstacle, especially for lecturers who are less familiar with technology-based approaches. These problems indicate that the use of digital media has not yet fully become a strategic strength for learning; instead, it can become a new obstacle if not addressed. Therefore, universities must not only focus on providing technology, but also ensure the readiness of human resources, supportive policies, and equal access so that the use of digital media truly has a real impact on the quality of learning.

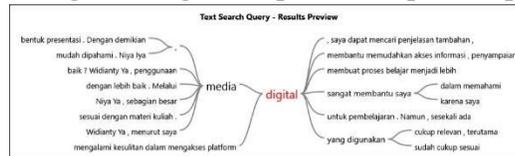
2. MATERIALS AND METHODS

Digital media is a technology-based learning tool used to support student learning on campus, such as online learning platforms, visual media, and collaborative applications. The use of digital media aligns with constructivist theory, which emphasizes students' active role in constructing knowledge through interactions with digital learning resources.

2. The Effectiveness of Digital Media in Learning in Terms of Accessibility, Material Understanding, and Ease of Learning Process



Based on the word cloud, the dominance of the words "digital media," "material," and "learning" indicates that digital media is the primary means for students to understand lecture material. The presence of the words "help" and "facilitate" indicates that digital media is considered effective in supporting learning comprehension. The words "video," "visual," and "presentation" indicate a more engaging presentation of material, while "internet" and "Google" emphasize easy access to learning resources. However, the presence of the words "obstacles" and "difficulties" indicates that technical barriers persist. Overall, digital media plays a vital role in learning, although it requires adequate support.



Based on text search query results, digital media is a key element in student learning on campus. Digital media is perceived as relevant to the course material, presented in a structured and easy-to-understand manner, thus supporting effective learning. Students also utilize digital media to access information and seek additional explanations, which helps deepen their understanding of the material and supports independent learning.

However, the analysis also revealed technical challenges, such as difficulty accessing certain platforms, which can impact learning. Overall, digital media was deemed relevant and helpful in student learning, although its success still depends on ease of access and the availability of supporting infrastructure.

3. Student Learning Independence in the Digital Era



Based on the word cloud, dominant words such as digital, learning, material, and time indicate that digital media is the primary means for students to understand material and manage their study time. The terms YouTube, e-book, Canva, and presentation emphasize their use as a learning resource and a tool for completing assignments. The presence of the word distraction

indicates the potential for disruption, so digital media use needs to be managed effectively and optimally.

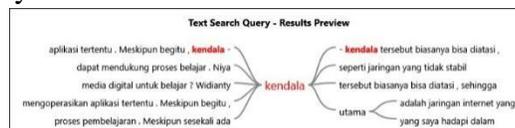


Based on text search query results, the keyword "material" indicates that students' use of digital media focuses on managing and deepening learning materials. Digital media is used to understand, process, and present material, including creating presentations, compiling summaries, and prioritizing assignments using applications like Canva and PowerPoint. Furthermore, digital media is used to access online learning resources, watch instructional videos, and utilize digital documents. Digital media also plays a role in learning management, helping students identify important material and organize study time. Overall, digital media supports material comprehension, assignment completion, and the effectiveness of the learning process on campus.

4. Supporting and Inhibiting Factors in Students' Digital Learning



Based on the word cloud, dominant words such as digital, media, learning, and constraints indicate that digital media is important for student learning, yet still faces barriers. Its utilization is highly dependent on internet network availability, campus facilities, and students' ability to operate digital platforms. Technical constraints such as network disruptions or device limitations can impact learning effectiveness. Overall, digital media plays a significant role, but optimizing its use requires infrastructure support and improving students' digital literacy.

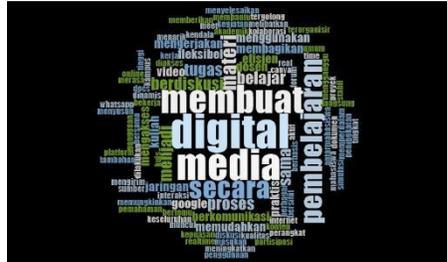


Based on text search queries, the keyword "obstacles" was the primary focus of respondents' statements, indicating that despite the widespread use of digital media in learning, students still face various obstacles. The most frequently encountered obstacles relate to application operation and technical issues, particularly unstable internet connections.

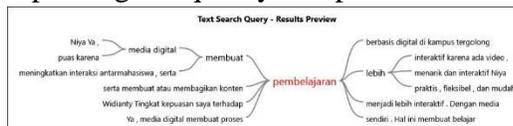
The statement branch on the left side indicates that these technical constraints are situational and do not completely hinder the learning process, as digital media still supports academic activities. Meanwhile, the statement branch on the right side emphasizes that students are able to overcome these constraints through adaptations, such as finding alternative networks, adjusting usage times, or utilizing other platforms.

Overall, these findings indicate that obstacles in utilizing digital media do exist, but with digital literacy and adaptability, students can still maximize digital media as an effective learning strategy in the campus environment.

5. The Impact of Digital Media on Student Learning Interactivity



Based on the word cloud, it appears that the primary focus of the data is "creating digital media for learning." This indicates that the use of digital media is viewed as central to the teaching and learning process. Supporting terms such as discussion, assignments, video, lecturer, student, communication, interaction, and platform emphasize that digital media plays a role in enhancing interaction, collaboration, and the effectiveness of material delivery. Furthermore, the emergence of terms such as flexible, accessible, real-time, and easy indicates that digital media helps overcome time and space constraints and supports more dynamic and participatory learning. Overall, this data illustrates a positive perception of digital media as an important tool for improving the quality and process of learning.



Based on the visualization of the text search query, the data shows that the use of digital media in learning on campus has received a positive response from students. Digital media is perceived as improving the quality of the learning process, particularly in terms of interactions between students and between students and learning materials. Students report greater satisfaction because digital media allows them to create, access, and share learning content more easily and quickly, thus making the learning process more efficient.

Furthermore, digital-based learning is considered more engaging and interactive, particularly due to the support of videos and other visual media that aid comprehension. The flexibility offered by digital media is also a major advantage, as students can learn anytime and anywhere without being bound by time and space. Therefore, this data indicates that digital media serves not only as a tool but also as a crucial tool for developing a participatory, applicable, and relevant learning process that meets the needs of students in the digital age.

3.2 Discussion

1. Utilization of Digital Media in the Context of Higher Learning

The use of digital media has become a key strategy in campus learning, in line with the digital transformation sweeping the world of higher education. The digitalization of learning involves various digital platforms and tools, such as online learning management systems, educational video content, interaction-based applications, and the use of social networks, as well as a means of academic communication and collaboration. Digital media not only functions as a tool for delivering material but also as an enabler, allowing students to access learning

resources flexibly, independently, and according to their individual learning needs. Research shows that digital media, such as e-learning, provide flexibility in study time while supporting independent learning for students in higher education.

2. Types of Digital Media and Their Role in Learning

On campus, digital media plays a vital role in supporting the learning process. Some commonly used types of digital media include:

1) Learning Management System (LMS)

An LMS such as Moodle, Google Classroom, or Canvas serves as an integrated platform for managing all learning activities, from material delivery and assignments to discussions and evaluations. An LMS allows lecturers and students to interact both asynchronously and synchronously, thereby increasing student engagement. Research shows that appropriate use of an LMS can enrich students' learning experiences, increase engagement, and facilitate the monitoring of academic achievement.

2) Interactive Learning Videos and Multimedia

Audio-visual content, such as video tutorials, animations, simulations, and infographics, helps students visualize complex concepts. This media is effective in capturing attention and motivating students to learn because the material is presented in a more interactive and easy-to-understand manner. Interactive multimedia also supports active learning, where students can interact with the material through simulations or quizzes within the video.

3) Digital Communication and Collaboration Platform

Educational social media, messaging groups (e.g., WhatsApp, Telegram), and collaboration platforms like Google Workspace or Microsoft Teams facilitate the rapid exchange of academic information, group discussions, and assignment guidance. These platforms enhance student-to-student collaboration and student-lecturer communication, making the learning process more dynamic and interactive.

4) Microlearning and Interactive Quiz Applications

Microlearning is a learning method that presents material in small, easily digestible units. Combined with interactive quiz apps like Kahoot! or Quizizz, this approach has been proven to increase student motivation and engagement. Students can learn quickly and focus on specific topics while receiving immediate feedback through interactive quizzes.

3. Benefits of Digital Media as a Learning Strategy

The use of digital media in learning at universities brings several important benefits that support the effectiveness and quality of the teaching and learning process:

1) Increasing Student Engagement

Digital media encourages active interaction between students and learning content, as well as among students themselves. Through platforms such as Learning Management Systems (LMS) and online discussion forums, students can participate more intensively, engaging in discussions and exchanging ideas with peers and lecturers. This engagement helps students understand the material more deeply and encourages active participation in the learning process.

2) Flexibility of Time and Place of Study

One of the advantages of digital media is its ability to allow students to access materials anytime and anywhere. This means that learning is no longer limited by physical classrooms or lecture schedules, allowing students to adapt their learning to their own pace and circumstances.

3) Supporting Self-Directed Learning

Digital media gives students the opportunity to explore additional material or deepen unfamiliar concepts. Students can set their own learning pace, prioritize topics that require more attention, and develop effective study strategies, making the learning process more personalized and adaptive.

4) Digital Skills Development

Consistent use of digital media also improves students' digital literacy, including the ability to use learning platforms, create digital content, and utilize technology for collaboration and research. These skills are relevant to the needs of the modern workplace, which demands technological mastery and the ability to adapt to digital environments.

4. Challenges in Implementing Digital Media

Despite its many benefits, the use of digital media is not without challenges:

1) Infrastructure and Access Limitations

Not all students have devices or a stable internet connection, so access to digital media can be uneven.

2) Competence of Lecturers and Students in Technology

Optimal implementation of digital media requires strong digital skills from both lecturers and students. Without adequate training, digital media's potential will not be maximized.

3) Dependence on Technology

Over-reliance can reduce face-to-face interactions and, in some cases, create digital distractions for students (e.g., use of devices for non-academic purposes).

5. Effective Strategies in Utilizing Digital Media

For digital media to be an effective learning strategy in a campus environment, the following approaches need to be applied:

1) Planned Pedagogical Integration

Learning planning must systematically combine digital media according to learning objectives, not just the use of technology without direction.

2) Digital Competency Training for Lecturers and Students

Face-to-face and online learning (blended learning) is a strategy that combines the strengths of both learning methods in a balanced way.

3) Blended Learning Approach

The combination of face-to-face and online learning (blended learning) is a strategy that combines the strengths of both learning methods in a balanced way.

4) Continuous Evaluation and Monitoring

The use of digital media should be evaluated periodically using academic achievement data, student satisfaction surveys, and other indicators to determine its effectiveness.

6. Implications for Higher Education in the Future

The use of digital media as a learning strategy on campus has important implications for the future direction of higher education. Technology integration will not only enrich the teaching and learning process but also prepare students to face global challenges and 21st-century skills needs. Furthermore, a structured digital approach supported by campus policies will create a learning environment that is more adaptive, innovative, and responsive to changing times.

4. CONCLUSION

Based on the research results and discussion, it can be concluded that digital media plays a crucial role as a learning strategy on campus. Students use digital media to access, process, and present learning materials, thus supporting independent learning, deeper understanding of the material, and effective completion of academic assignments.

Furthermore, digital media enhances interaction and collaboration among students, both in group discussions and information exchange, making the learning process more participatory and dynamic. Another advantage of digital media is its flexibility and ease of access, allowing students to learn anytime and anywhere, as well as assisting with time management and study priorities.

However, there are technical and operational challenges, such as unstable internet connections, limited devices, and students' limited ability to operate digital applications. These challenges are situational and can be minimized through student adaptation, infrastructure support, and increased digital literacy.

Overall, digital media serves not only as a supporting tool but has become a crucial part of today's learning strategies. With planned implementation, supporting facilities, and strengthening digital competencies, digital media plays a significant role in improving the effectiveness, quality, and engagement of students in the teaching and learning process in higher education.

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