

USE OF ZOOM MEETING IN ONLINE LEARNING IN INDONESIA: LITERATURE REVIEW

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ABSTRACT

The development of information and communication technology has driven the transformation of the learning system in Indonesia, particularly through the implementation of online learning. One platform widely used in distance learning is Zoom Meeting, which enables synchronous interaction between educators and students through video conferencing. This study aims to examine the use of Zoom Meeting in online learning in Indonesia through a literature review method. The data sources used are derived from previous research and analyzed descriptively to obtain an overview of the benefits, effectiveness, and challenges of using Zoom Meeting in the learning process. The results of the study indicate that Zoom Meeting plays a significant role in improving learning interaction and communication, as well as having a positive impact on student motivation and learning engagement. Features such as screen sharing, breakout rooms, and learning recordings support more interactive and flexible material delivery. However, the use of Zoom Meeting also faces various obstacles, such as limited internet access, lack of conceptual understanding of certain materials, low participation of some students, and limited digital literacy of educators. Overall, Zoom Meeting is effective as a supporting medium for online learning, but it is not yet able to fully replace face-to-face learning optimally. Therefore, a more comprehensive integration of learning strategies is needed to increase its effectiveness in education in Indonesia.

Keywords: Zoom Meeting, online learning, literature study, distance education, educational technology, learning interaction.

1 INTRODUCTION

The development of information and communication technology has brought significant changes to various aspects of human life, including education. The digital transformation that has occurred over the past few decades has spurred the emergence of various learning innovations that utilize technology as the primary means for delivering material, interacting between educators and students, and managing academic activities. The increasingly widespread and easily accessible internet has enabled learning activities to transcend the constraints of time and space. This has become the foundation for the development of online learning systems, which are currently widely implemented by various educational institutions in Indonesia.

Online learning is a learning method that utilizes the internet network and digital devices to support the teaching and learning process. Through online learning, students can access learning materials, participate in discussions, complete assignments, and interact with educators without having to be physically present in the classroom. This learning model offers various advantages, such as flexibility in time, easy access to learning resources, and the ability to reach students across various geographic regions. Therefore, online learning is gaining increasing attention as an alternative that can increase the effectiveness and efficiency of education in the digital era.

In Indonesia, the implementation of online learning has accelerated significantly, especially since the COVID-19 pandemic began in 2020. Social distancing policies and the temporary closure of educational institutions required schools and universities to shift all learning activities to digital platforms. This sudden change required educators, students, and educational institutions to adapt to various technologies that support distance learning. In this situation, various online learning platforms, both Learning Management System (LMS) and video conferencing applications, have become widely used.

One platform that has gained significant attention in supporting online learning is Zoom Meeting. This application allows users to communicate synchronously (synchronous learning) through video

conferencing, audio, screen sharing, group discussion rooms, and various other interactive features. Its ease of use and comprehensive features make Zoom Meeting a primary choice for schools, universities, and training institutions implementing online learning. Through Zoom Meeting, interactions that typically occur in a traditional classroom can be replicated virtually, allowing students to continue communicating directly with educators and fellow students.

The use of Zoom Meetings in online learning offers several benefits that contribute to the continuity of the educational process. This platform allows for real-time delivery of material, allowing students to receive direct explanations from educators and ask questions simultaneously. Furthermore, the screen-sharing feature makes it easier for educators to present learning materials, presentations, and demonstrations to support student understanding. The recording feature also allows the learning process to be documented and reviewed by students who need to review the material.

However, the use of Zoom Meetings in online learning also faces various challenges. One major obstacle is the dependence on a stable internet connection. In Indonesia, the gap in internet access remains a problem for some communities, especially those in remote areas. This can cause disruptions during the learning process, such as audio delays, poor video quality, or even connection drops. Furthermore, prolonged use of Zoom Meetings can lead to digital fatigue, decrease student concentration, and reduce learning effectiveness if not balanced with appropriate teaching strategies.

Various studies have been conducted to examine the use of Zoom Meetings in online learning in Indonesia. These studies generally discuss the effectiveness of Zoom Meetings, user satisfaction levels, their impact on learning outcomes, student motivation, and the challenges encountered during implementation. The results indicate that Zoom Meetings can improve interaction and communication in online learning, but their effectiveness is heavily influenced by technological readiness, the digital competence of educators and students, and the availability of supporting infrastructure. These findings demonstrate that the use of Zoom Meetings in education is a complex phenomenon that requires more comprehensive study.

With the increasing number of studies on the use of Zoom Meetings in online learning, a study that integrates these findings is needed to obtain a more comprehensive picture of the development, benefits, challenges, and effectiveness of its use in the educational context in Indonesia. A literature review is one approach that can be used to identify patterns in research findings, compare the results of different studies, and identify research gaps that require further study. By conducting a literature review, researchers can gain a deeper understanding of how Zoom Meetings are utilized in the learning process and the factors that influence their success.

Based on the above description, this study aims to review various literature discussing the use of Zoom Meetings in online learning in Indonesia. This study is expected to provide a comprehensive overview of the implementation of Zoom Meetings in education, the benefits obtained, the obstacles encountered, and their implications for the learning process. Furthermore, the results of this literature review are expected to serve as a reference for educators, researchers, and policymakers in developing more effective online learning strategies that are tailored to the needs of education in the digital era. Thus, this research makes an important contribution to enriching the body of knowledge regarding the use of digital technology, particularly Zoom Meetings, in supporting educational transformation in Indonesia.

2 RESEARCH METHOD

This study used a literature review method to examine various studies discussing the use of Zoom Meetings in online learning in Indonesia. The literature review method was chosen because it allows researchers to collect, analyze, and synthesize findings from various scientific sources to gain a comprehensive understanding of the implementation, benefits, and challenges of using Zoom Meetings in online learning activities.

The data used in this study are secondary data obtained from various scientific publications, such as journal articles, seminar proceedings, and other academic publications relevant to the research topic. The literature search was conducted through several scientific databases, including Google Scholar, Garuda (Garba Rujukan Digital), and SINTA (Science and Technology Index). Keywords used in the search process included "Zoom Meeting," "online learning," "online learning," "video conference," and "education in Indonesia."

The inclusion criteria used in selecting the literature included: (1) articles discussing the use of Zoom Meetings in learning activities; (2) research conducted in the context of education in Indonesia; (3) articles published in journals or scientific proceedings; and (4) articles were available in full text for in-depth analysis. Meanwhile, literature that was irrelevant to the research topic, duplicated articles, or did not provide sufficient information was excluded from the analysis process.

The research phase involved several steps: (1) identifying and collecting relevant literature; (2) selecting literature based on predetermined criteria; (3) thoroughly reading and reviewing the contents of the articles; (4) grouping research findings based on specific themes, such as the effectiveness of Zoom Meeting use, benefits, constraints, and impact on the learning process; and (5) synthesizing and interpreting the study results to obtain comprehensive conclusions.

The data analysis technique used was qualitative descriptive analysis. The analysis was conducted by identifying, comparing, and interpreting the findings from the various selected studies. The results of the analysis were then presented systematically in narrative form to illustrate research trends, the benefits of Zoom Meeting use, the constraints encountered, and their implications for the implementation of online learning in Indonesia.

Through this method, the research is expected to provide a comprehensive overview of the use of Zoom Meeting in online learning and serve as a basis for further research in the development of learning technology in Indonesia.

3 RESULT AND DISCUSSION

Based on the results of a review of previous research, the use of Zoom Meeting in online learning in Indonesia shows a relatively consistent pattern of findings, namely as a distance learning medium that is able to support the interaction process, but still faces various limitations both from a technical and pedagogical perspective, as well as user readiness.

3.1 The Role of Zoom Meetings in Online Learning

The synthesis of various studies shows that Zoom Meetings serves as a primary platform for synchronous learning, enabling direct communication between educators and students, even when they are in different locations. Zoom is considered a cloud-based video conferencing platform that provides virtual face-to-face facilities, thus replacing the function of traditional classrooms in distance learning settings.

In the educational context, Zoom is used not only in schools but also in universities and for teacher training activities. This platform has become a key solution during the pandemic and remains relevant as part of digital technology-based learning in the post-pandemic era.

3.2 Advantages of Using Zoom Meetings

Based on the results of previous journal analysis, there are several main advantages of using Zoom Meetings in online learning in Indonesia. First, Zoom can enhance interaction and communication between teachers and students, or lecturers and students. Features such as chat, audio-video, screen sharing, and breakout rooms enable more active two-way discussions than asynchronous learning. This is evident in findings that students find it easier to ask questions, discuss, and express their opinions directly.

Second, Zoom has a positive impact on motivation and learning engagement. Several studies show that students find learning more enjoyable, more engaging, and less boring. In this aspect, Zoom has a greater impact on the affective domain, such as enthusiasm and comfort in learning.

Third, Zoom supports the flexibility of distance learning, particularly at the tertiary level. Students can access learning from anywhere, review material through recordings, and adapt the learning process to their individual circumstances.

Fourth, Zoom also supports the diversification of learning methods, such as lectures, group discussions, Problem-Based Learning (PBL), and Project-Based Learning (PjBL). This demonstrates that Zoom can be a medium that supports pedagogical innovation in online learning.

3.3 Limitations and Challenges of Using Zoom Meetings

Despite its numerous advantages, studies show that the use of Zoom Meetings still faces a number of significant challenges.

First, the most frequently encountered challenges are technical issues, particularly internet network stability, limited data quotas, and device quality. This directly impacts the smoothness of the learning process and material comprehension.

Second, from a learning perspective, Zoom is not yet fully effective in enhancing understanding of complex concepts. Several studies have shown that although students feel more comfortable and motivated, their understanding of certain materials (such as mathematics) remains low due to limited in-depth interaction and minimal conceptual exploration.

Third, there is the issue of uneven student participation. In Zoom-based online learning, only some students actively ask questions or engage in discussions, while others tend to passively receive information.

Fourth, there are challenges related to the readiness of human resources, particularly teachers. Several studies have shown that teachers' digital literacy is still limited in optimally utilizing Zoom features, resulting in learning tending to focus solely on delivering material.

Fifth, in certain contexts, learning via Zoom can also lead to digital fatigue and reduced focus due to less conducive learning environments at home.

3.4 The Impact of Zoom Use on the Learning Process

In general, the study results indicate that the impact of Zoom Meetings can be divided into two main aspects. In the affective aspect, Zoom tends to have a positive impact, resulting in increased learning motivation, a sense of comfort, and a more engaging learning experience compared to other one-way online methods.

However, in the cognitive aspect, particularly in terms of conceptual understanding and learning outcomes, Zoom has not shown optimal results. This is due to limited in-depth interaction, a lack of hands-on practice, and the dominance of the lecture method in online learning.

Thus, it can be concluded that Zoom is more effective as a medium for communication and learning interaction, but not yet fully effective as the sole medium for building in-depth conceptual understanding.

3.5 Learning Implications

Based on findings from previous journals, the use of Zoom Meetings in online learning needs to be supported by more structured pedagogical strategies to be more effective. Teachers and lecturers need to optimize available features such as breakout rooms, screen sharing, and interactive discussions to increase student engagement.

Furthermore, learning via Zoom should be combined with other methods such as project-based assignments, step-by-step exercises, and the use of a Learning Management System (LMS) to strengthen conceptual understanding.

From an educational policy perspective, improving teachers' digital literacy is crucial so that Zoom's use is not limited to presentations but also becomes a meaningful, interactive learning tool.

4 CONCLUSION

Based on a literature review of previous research on the use of Zoom Meetings in online learning in Indonesia, it can be concluded that Zoom Meetings are an effective synchronous learning platform for supporting communication and interaction between educators and students during distance learning.

In general, the use of Zoom Meetings has a positive impact, particularly on affective aspects, such as increased learning motivation, comfort, and student engagement in the learning process. Available features such as video conferencing, screen sharing, chat, and breakout rooms contribute to the creation of more active interactions and a more engaging learning environment.

However, the effectiveness of Zoom Meetings still has limitations on the cognitive aspect, particularly in understanding complex concepts. This is due to various factors, such as internet network constraints, limited devices, lack of active student participation, and educators' suboptimal digital literacy in utilizing learning features to their full potential.

Therefore, it can be concluded that Zoom Meetings are not the sole solution for online learning, but rather a supporting tool that needs to be integrated with more varied and structured learning

strategies. Optimizing the use of Zoom Meetings and improving educators' competency in utilizing technology are crucial factors in improving the quality of online learning in Indonesia.

REFERENCE

- Alfaeni, D., Nurkanti, M., & Halimah, M. (2022). *Students' Collaboration Ability Through The Project-Based Learning Model Using Zoom On Materials*. Pp. 143–149.
- Hasibuan, P., Salamah, S., Ginting, B., Syamfitri, A., & Siregar, N. S. (2024). *Implementation Of The Zoom Meeting Application In Mathematics Learning On Sequence Material*. Pp. 31–37.
- Mahfud, T., Winnarko, H., & Polytechnic, B. S. (2023). *Analysis Of Zoom Application Acceptance In Online Learning By Students During Covid-19: Technology Acceptance Model (Tam) Approach*. 07(01), 1–17.
- Nuriah, L. (2022). *The Effect Of Zoom Cloud Meeting E-Learning On The Motivation And Visual Learning Styles Of Fifth-Grade Students At Pekanbaru Public Elementary Schools, Riau*. 08(January), 201–212.
- Nurul, A., Harahap, I., & Mahartika, I. (2023). *The Use Of Zoom Premium Video Conferencing In Chemistry Learning: A Study Of Student Perceptions*. 3, 1126–1136.
- Serepinah, M., Sarifah, I., Iqbal, M., & Ghozali, A. (2023). *The Effect Of Online Learning On Student Learning Outcomes From Different Educational Levels*. 9(1), 231–236.
- Setiawan, E., Wijati, L. N., & Ana, S. (2023). *Student Behavior In Learning Through Zoom Meeting Media*. 220–230.
- Silaen, S. (2024). *Supervision In Improving Learning Media Through The "Zoom Meeting" Application*. 4, 336–340.
- Wibowo, N., Suswandari, M., & Widyastuti, E. (2022). *Online learning strategies through Zoom Meeting*. *Prima Magistra: Scientific Journal of Education*, 3(2), 150–158.
- Qolbi, S. K., Sabarudin, S., Kholilurrohman, K., & Perwitasari, N. (2022). *The effectiveness of online learning between Zoom Meet and Google Meet facilities*. *Basicedu Journal*, 6(2), 1551–1562.
- Fathiyah, L., & Yarti, I. (2022). *Analysis of the use of the Zoom platform with digital literacy skills in fifth grade elementary school students*. *Jurnal Cakrawala Pendas*, 8(3), 746–757.