

THE EFFECTIVENESS OF GAME-BASED LEARNING MODELS IN CREATING INTERACTIVE AND MEANINGFUL LEARNING

Dela Ayu Puspita

Delap6944@gmail.com

Universitas PGRI Silampari

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Abstract : Rapid technological developments and changing student characteristics require innovation in the learning process. One popular approach is Game-Based Learning (GBL), a learning model that integrates game elements to increase student engagement, motivation, and understanding of the material. This research employed a literature review method, examining various sources, including 10 books and 5 scientific journals, related to the application of Game-Based Learning in education. The study results indicate that this model can strengthen interactions between teachers and students, encourage student engagement, and help them better understand learning concepts. Furthermore, the use of games in learning activities has been shown to increase enthusiasm for learning and create a more engaging and engaging classroom atmosphere. However, implementing Game-Based Learning requires sound planning and teacher skills in managing game-based activities to ensure effective and optimal learning objectives are achieved.

Keywords: Game-Based Learning (GBL), Student Engagement, Learning Motivation, Active Participation, Conceptual Understanding.

INTRODUCTION

Education plays a crucial role in the national development is because it is directly related to improving the quality of human resources. Through education, individuals not only acquire knowledge but also learn to shape their mindsets, attitudes, and behaviors in everyday life. Therefore, the learning process should not only focus on delivering material but also provide space is for students to understand and apply the meaning of what they learn. Good education is expected

to help students develop critical and creative thinking skills, as well as the ability to adapt to changing times. In today's era of globalization, the challenges faced are increasingly complex, necessitating individuals who are not only academically intelligent but also possess social skills and problem-solving abilities. In practice, effective learning is characterized by active student engagement in class. Students not only listen to the teacher's explanations but also participate in discussions, ask questions, and try to find answers to the problems presented. This way, the learning process becomes more meaningful and memorable. This aligns with the opinion of Anderson and Dron (2020), who emphasized that active student involvement is crucial for building understanding through real-life learning experiences. Furthermore, a comfortable and enjoyable learning environment also influences learning success. When students feel engaged and not stressed, they tend to more easily absorb and understand the material. Im Therefore, teachers need to create a supportive learning environment and use a variety of approaches tailored to student characteristics to optimally achieve learning objectives. In reality, the learning process in schools is often dominated by conventional, one-way methods. Teachers primarily serve as transmitters of material, while students merely receive information without much active involvement. This situation can result in low student participation and reduced motivation to learn (Sanjaya, 2022).

On the other hand, the development the of digital technology has also influenced the characteristics of today's students. Generations growing up in the digital era are generally more interested in visual, interactive, and challenging whay activities. This suggests that learning approaches also need to adapt to these changes, one way being to introduce more creative and innovative methods (Schunk, 2023). One alternative that can be implemented is the Game-Based Learning approach. This model utilizes game elements as a learning tool, making the learning process more engaging and less monotonous. Through this approach, students are encouraged to be more actively involved because they learn while playing. According to Kapp (2022), the use of Game-Based Learning can provide a learning experience that is not only enjoyable but also challenging. This way,

students become more motivated to participate in learning and understand the material more easily.

Based on this description, this article aims to review various literature on the effectiveness of Game-Based Learning in creating interactive and meaningful learning for students.

DISCUSSION

A. The Concept of Game-Based Learning in Learning

Game-Based Learning is an innovative learning approach that utilizes game elements as a means to achieve learning objectives. This approach is designed to create a more engaging, interactive, and engaging learning experience.

and can increase student engagement in learning activities. According to Prensky (2021), Game-Based Learning is a learning process that utilizes digital and non-digital games to increase student motivation and participation in learning activities. In the context of modern education, the use of games in learning is considered to provide a different learning whay experience compared to conventional learning methods. Games allow students to learn through exploration, experimentation, and problem-solving that arise in the game. Gee (2021) explains that games have great potential in creating an active and challenging learning environment so that students can the develop critical thinking and problem-solving skills. Furthermore, Game-Based Learning also provides opportunities for students to learn through direct experience. Learning experiences gained through games can help students understand learning concepts more deeply because they are actively involved in the learning process (Arsyad, 2021).

Thus, Game Based Learning can be understood as a learning approach that integrates game elements with educational goals is so that the learning process becomes more interesting, interactive and meaningful.

B. Characteristics

of Game-Based Learning Game-based learning has several characteristics that distinguish it from conventional learning methods. One key characteristic is the presence of challenges that encourage students to achieve specific goals. These challenges can increase students' intrinsic motivation because they feel compelled to complete the various tasks assigned (Sailer & Homner, 2024).

Another characteristic of Game-Based Learning is the direct feedback system provided to students. This feedback allows students to understand the results of their actions in the game, allowing them to refine their strategies for solving challenges (Plass, Homer, & Kinzer, 2022). Furthermore, game-based learning often incorporates a reward system, such as points, levels, or badges. This reward system can increase students' learning motivation because they feel appreciated for their efforts (Kapp, 2022).

Game-Based Learning is also emphasizes active student involvement in the learning process. In this learning model, students not only passively receive information but also directly engage in various activities that require their active participation. This aligns with Slavin's (2022) opinion, which states that effective learning must actively engage students in the learning process.

C. The Role of Game-Based Learning

in Increasing Learning Motivation Learning motivation is a crucial factor influencing student success in the learning process. Students with high learning motivation tend to be more active in participating in the learning activities and more easily understand the material presented by the teacher (Uno, 2021). Game-Based Learning can be an effective strategy for increasing student learning motivation. Through games, the learning process is becomes more engaging and enjoyable, thus increasing student enthusiasm for learning activities. Research conducted by Clark, Tanner-Smith, and Killingsworth (2021) shows that the use of games in learning can significantly increase student engagement and learning motivation.

Furthermore, the competitive element in games can also boost students' enthusiasm for learning. In many educational games, students strive to achieve the highest score or reach a certain level. This can motivate them to study harder to achieve their desired goals (Qian & Clark, 2023).

D. Game-Based Learning in Increasing Learning Interactivity

Interactivity is a crucial aspect of an effective learning process. Interactive learning enables two-way communication between teachers and students, making the learning process more dynamic. According to Sanjaya (2022), interactive learning can help improve students' understanding of the material being studied. Game-Based Learning can increase interactivity in learning because students are directly involved in various game activities. During the game, students must interact with their peers and teachers to complete various challenges (Plass et al., 2022). Furthermore, games can create a more lively and enjoyable classroom atmosphere. Students become more active in discussions, asking questions, and collaborating with their peers to achieve game goals. These collaborative activities can help improve students' communication and social skills.

E. Game-Based Learning in Creating Meaningful Learning

Meaningful learning is a learning process that enables students to deeply understand concepts and relate them to their prior knowledge. According to Schunk (2023), meaningful learning occurs when students can connect new information to existing knowledge structures in their minds. Game-Based Learning can support meaningful learning because students learn through direct experience. In games, students are often faced with various situations that require them to think critically and solve emerging problems (Gee, 2021). Furthermore, games also allow students to explore the various concepts being learned. This exploration process helps students understand the material more deeply and improves their retention of the concepts learned (Kapp, 2022).

F. Challenges in Implementing Game-Based Learning.

Despite its many advantages, the implementation of Game-Based Learning is not without its challenges. One particularly noticeable challenge is teacher preparedness. Not all teachers are accustomed to designing game-based learning, requiring creativity and a thorough understanding to ensure the games used align with learning objectives (Prensky, 2021).

Furthermore, limited resources and technology are often obstacles. Not all schools have adequate devices or digital access to support the use of educational games. In such circumstances, teachers need to be more creative by utilizing simple games that don't rely on high technology (Arsyad, 2021). Another factor that needs to be considered is time the allocation. Game-based activities typically require more time than traditional learning methods. In If not managed properly, this can interfere with the achievement of planned material. Therefore, teachers need to manage their time effectively so that game activities continue to support learning objectives (Sanjaya, 2022). im Challenges in Implementing Game-Based Learning Despite its numerous advantages.

CONCLUSION

Based on the results of the literature review, it can be concluded that the Game-Based Learning model is quite effective in creating an interactive and meaningful learning process. The use of games in learning activities has been proven to increase student motivation and engagement, and help them understand the material better. Furthermore, game-based learning also provides opportunities for students to develop various important skills, such as critical thinking, creativity, and collaboration. Through challenging and enjoyable activities, students not only learn theory but also practice their problem-solving skills. However, implementing this model cannot be done haphazardly. Teachers need to prepare thorough plans and be able to design game activities that align with learning objectives. With proper preparation, Game-Based Learning can be an alternative, innovative learning strategy to improve the quality of the classroom learning process.

BIBLIOGRAPHY

- Anderson, T., & Dron, J. (2020). *Teaching Crowds: Learning and Social Media*. Athabasca University Press.
- Arsyad, A. (2021). *Learning Media*. Jakarta: RajaGrafindo Persada.
- Branch, R. M., & Kopcha, T. J. (2021). *Instructional Design: The ADDIE Approach*. Springer.
- Gee, J. P. (2021). *What Video Games Have to Teach Us About Learning*. Palgrave Macmillan.
- Kapp, K. M. (2022). *The Gamification of Learning and Instruction Fieldbook*. Wiley.
- Prensky, M. (2021). *Digital Game-Based Learning in Education*. McGraw-Hill.
- Sanjaya, W. (2022). *Learning Strategies Oriented to Educational Process Standards*.
- Kencana. Schunk, D. H. (2023). *Learning Theories: An Educational Perspective*.
- Pearson. Slavin, R. E. (2022). *Educational Psychology: Theory and Practice*. Pearson.
- Uno, H. B. (2021). *Motivation Theory and Its Measurement in Education*.
- Literary Earth. Clark, D. B., et al. (2021). *Digital games, design, and learning. Review of Educational Research*.
- Hamari, J., et al. (2021). *Challenging games help students learn. Computers & Education*.
- Plass, J. L., et al. (2022). *Foundations of game-based learning. Educational Psychologist*.
- Qian, M., & Clark, K. R. (2023). *Game-based learning and 21st century skills. Computers in Human Behavior*.
- Sailer, M., & Homner, L. (2024). *The gamification of learning: A meta-analysis. Educational Psychology Review*.