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GAMIFICATION LEARNING FRAMEWORK FOR IMPROVING STUDENTS' LEARNING MOTIVATION

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ABSTRACT

The Covid-19 pandemic necessitates full virtual or online learning by educational entities. Students' excitement for studying decreases throughout online learning, making them appear inactive during the learning process. The goal of this study is to see if using gamification in virtual learning may boost students' enthusiasm to learn. This type of study employs classroom action research with a total of 93 students from class IV at MIN 3 Jombang in the odd semester of the 2021/2021 academic year. Questionnaires and observations were employed to obtain data. A questionnaire was employed to conduct this study. Descriptive quantitative data analysis was utilized to analyze the data. The percentage of typical class students' learning motivation increased from 77.84 percent in the first cycle to 90.32 percent in the second cycle, meeting the study's 80 percent success threshold. According to the findings, the use of gamification in learning could improve the learning motivation of fourth-grade students at MIN 3 Jombang.

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1. INTRODUCTION

The global Covid-19 pandemic has had a significant impact on several aspects of life, including education (Aristovnik et al., 2020; Muzaini et al., 2021; Pandey & Pal, 2020; Onyeaka et al., 2021; Suherman, 2021). During the epidemic, student learning activities have become a problem. For a long time, efforts were made to prevent crowds and student interactions, resulting in the elimination of face-to-face teaching and learning in schools, which was later substituted with online learning as a remedy. Students can access learning activities without being constrained by space or time by using the internet as a platform to impart knowledge without needing to meet face to face. Furthermore, this online learning can be done at any time and in any location without regard for the passage of time (Mishra et al., 2020; Giatman et al., 2020).

There are numerous roadblocks in the implementation of virtual learning. Physical Education, Sports, and Health (PJOK) disciplines are no exception, with these subjects playing a vital role in students' skill and emotional development. According to preliminary research conducted by researchers in fourth-grade students at MIN 3 Jombang, 58 of the total 93 students (62.36 percent) experienced learning loss or lost enthusiasm to learn.

According to research conducted by Aliyyah et al. (2020); Hamdan et al. (2020); Catalano et al. (2021), online learning causes interference, such as students not focusing on

learning, insufficient learning facilities, and a lack of teacher and parent preparation. Furthermore, students are easily bored and sluggish as a result of non-interactive learning, which has an impact on children's psychology (Macklem, 2015; Sahronih et al., 2020). The adoption of non-interactive approaches is assumed to be the cause of this. In other words, it is an indication of learning loss if left unchecked.

Learning loss is defined by a decrease in student interest in instruction; learning can be uninteresting and non-interactive, making pupils bored and lethargic (Skar et al., 2021; Chen et al., 2021; Zhao, 2021). Learning loss is the result of an abrupt shift; those who are affected by learning loss are usually those who are not prepared for change. Appropriate learning strategies are required to meet the learning objectives.

Learning will be carried out optimally if it is supported by methods, appropriate materials, media, and tools in order to create active learning (Hout-Wolters et al., 2000; Kodovsky et al., 2011; Aditya et al., 2019; Sakti et al., 2021). Considering the conditions of implementing online learning, the use of interactive methods, such as the gamification method, can help to learn to be meaningful (gamification) (Signori et al., 2018; Saleem et al., 2021). The implementation of this gamification strategy is based on the characteristics of pupils who enjoy playing in elementary school. If it relates to the division of developmental phases in children. This indicates that pupils at this age like playing, moving, working in groups, and feeling or doing things firsthand.

Gamification is a learning strategy that uses aspects from games or video games to motivate learners and increase their enjoyment and engagement in the learning process (Simões et al., 2013; Llorens-Largo et al., 2016). This media can also be used to record fascinating and inspiring things to accomplish. continuing to educate yourself. Gamification is also defined as a method of arousing interest and motivation, promoting problems, and solving problems via the use of game-based mechanics, aesthetics, and methods of thinking.

The steps for implementing gamification in learning are as follows:

1. Using quizzes or games that students can quickly access, such as Kahoot, Quizizz, Educandy, Powtoon, and online snake ladder programs.
2. The topic is separated into various distinct divisions. Give a quiz at the end of each section, and if participants/students pass the quiz, give them an award or a gift in the form of a virtual badge.
3. The material is divided into various levels with varying degrees of difficulty. Students gain badges as they succeed in their studies, and higher levels are unlocked as they learn new content.
4. In each section, the results are noted. This is to encourage pupils to concentrate on raising their overall scores.
5. Provide incentives like badges, awards, and achievements that can be shared on social media by students.
6. Form task groups so that students can work together to finish projects.
7. When students complete new challenges, surprise them with additional bonus incentives.
8. Use 'countdown' on multiple quizzes to create fake pressure. Students will experience time limitations as a result of this strategy.
9. If the learner fails to complete specific challenges, reclaim the badge or award.
10. To create a spirit of competition and collaboration, display a leaderboard that reflects the success of all students across departments, geographies, and specialties.

Another part of this study that is being looked into is motivation. Students are reluctant to participate in lessons and tend to be passive when getting explanations from the teacher, among other issues that arise during the learning process. Another fact demonstrates

that in the learning process, teachers mostly give subject content and rarely stimulate students to teach (Lai et al., 2018; Becker et al., 2019). This is due to the enormous number of subjects that must be taught, which causes teachers to focus solely on providing material rather than attempting to pique students' interest and enthusiasm to study. The essential urge that pushes a person to behave is defined as motivation (Reiss, 2004). In addition to the educational environment and learning discipline, learning motivation is one of the elements that influence learning accomplishment (Tokan et al., 2019 Arisetiyana et al., 2020; Widhiyanti et al., 2022). Furthermore, learning motivation is the entire driving power within pupils that generates learning activities, ensures learning activity continuity, and gives learning activities direction so that the learning subjects' goals can be met. ARCS, which stands for Attention, Relevance, Confidence, and Satisfaction, is one of the learning motivation assessment theories proposed by (Li & Moore, 2018; Ucar & Kumtepe, 2020).

Students might be more motivated to be active and participate in the learning process by using a game to assist them to understand the material offered (Su & Cheng, 2015; Hartt et al., 2020). The use of games in the classroom can also help students gain confidence and bridge the gap between faster and slower learners. As a result, gamification learning is projected to boost student motivation in the classroom.

The researcher did a study on the topic of gamification learning as a solution to the phenomena of declining learning motivation of primary school students with online learning during the Covid-19 pandemic, based on the description of the background that has been supplied.

2. METHOD

This research is a type of classroom action research. The examination of a situation with suggested measures to improve the situation's quality is known as action research. Kurt Lewin devised the classroom action research model that was used (Coghlan & Jacobs, 2005; Chaiklin, 2011). This approach is founded on the idea that research is made up of four primary components, each of which has its own set of steps: planning, action, observation, and reflection. Therefore, the goal of this research was to see if using gamification in virtual learning may improve students' motivation to learn.

93 students in class IV were used as research subjects at MIN 3 Jombang from August to October 2021. A questionnaire will be used to collect data in this study. The data analysis technique utilized in this study was descriptive quantitative data analysis, which entails interpreting and concluding the outcomes of the questionnaire score calculations into descriptive results. Each statement item in the questionnaire is grouped by the observed element, and then the total score for each item is determined using the scoring standards. The number of points obtained is expressed as a percentage and is classified based on the questionnaire's qualifications.

3. RESULTS AND DISCUSSION

3.1 Results

Questionnaires are given out at the end of each learning cycle. All fourt-hgrade students at MIN 3 Jombang, a total of 93 students, were given questionnaires. The findings of the questionnaires issued in the first and second cycles yielded the following data, as shown in table 1.

Table 1. Scores of Learning Motivation Cycle I and Cycle II

No	Indicator	Scores (%)	
		Cycle I	Cycle II
1	Material feels easy	75,27	88,17
2	Interesting learning	78,49	93,55
3	Understand the material presented	76,34	91,40
4	Feeling happy during learning	83,87	88,17
5	Satisfied with the results achieved	76,34	91,40
6	Clarity of the material presented	78,49	88,17
7	Completing assignments and getting good grades is important	75,27	92,43
8	The relationship between material and real life is clearly visible	75,27	89,25
Average score		**77,42**	**90,32**

The following is a diagram of increasing learning motivation scores from cycle I to cycle II presented in Figure 1.

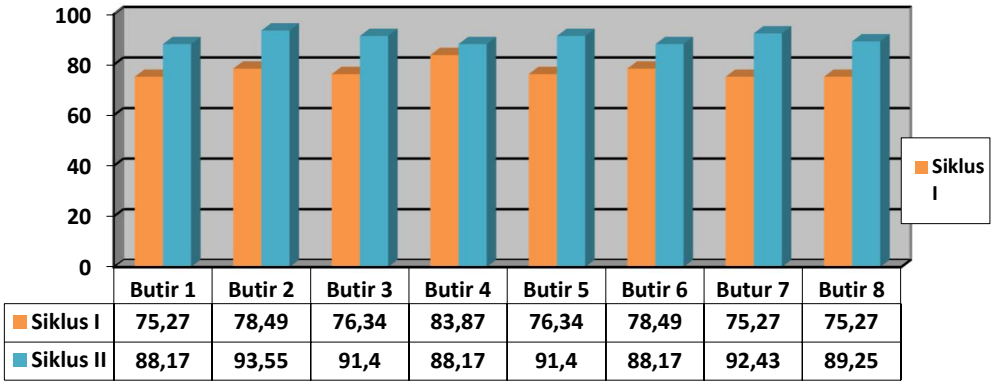

Figure 1. Diagram of Increasing Student Learning Motivation in Class IV

Information:
Item 1 = Material feels easy
Point 2 = Interesting learning
Point 3 = Understanding the material presented
Item 4 = Feeling happy during learning
Item 5 = Satisfied with the results achieved
Point 6 = Clarity of the material presented
Item 7 = Completing tasks and getting good grades is important
Item 8 = The relationship between material and real life is clearly visible

It can be continued with a full explanation of each of the indicators based on the analysis of the data that has been shown above:

3.11. Material feels easy

The proportion for the simple material indicator increased from 75.27 percent in the first cycle to 88.17 percent in the second cycle, representing a 12.9 percent raise. The rise in percentage suggests that students are more willing to accept the information offered through gamification.

3.12. Interesting learning

From 78.49 percent in the first cycle to 93.55 percent in the second cycle, the percentage of the second indication of interesting learning increased by 15.06 percent. This huge rise may explain why students find gamified learning more engaging.

3.13. Understand the material presented

From 76.34 percent in the first cycle to 91.40 percent in the second, the percentage of indicators of understanding the material provided grew by 15.06 percent. This third indicator is linked to the first and second indicators, namely, pupils are able to comprehend the material offered because they find studying to be more fascinating, and the material appears to be simple to comprehend.

3.14. Feeling happy during learning

A big percentage of students feel pleased while learning through gamification of learning, which is 83.87 percent in the first cycle, and a rise of 4.3 percent in the second cycle, which is 88.17 percent.

3.15. Satisfied with the results achieved

The percentage of students who are satisfied with their results has increased by 15.06 percent from 76.34 percent in the first cycle to 91.40 percent in the second cycle. Students are satisfied with the learning results they have achieved through learning gamification, as seen by the rise in this metric.

3.16. Clarity of the material presented

It can be explained that the material conveyed through gamification can be clearly accepted by IV MIN 3 Jombang students based on the indicators of the clarity of the material presented, which shows an increase of 9.68 percent from 78.49 percent in the first cycle to 88.17 percent in the second cycle.

3.17. Completing assignments and getting good grades is important

From 75.27 percent in the first cycle to 92.43 percent in the second cycle, there is a 17.16 percent increase in percentage. This big rise could imply that students believe they have a responsibility to finish assignments and receive good grades as a result of the information they have received.

3.18. The relationship between material and real-life is clearly visible

The percentage of indications indicating the relationship between material and real-life increased from 75.27 percent in the first cycle to 89.25 percent in the second cycle, representing a 13.98 percent raise. The rise in percentage demonstrates that students comprehend contextual learning or the connection between the subject taught and everyday life.

According to the eight criteria listed above, the majority of MIN 3 Jombang fourth grade students have boosted their learning motivation in PJOK learning through gamification. Both in cycle I and cycle II, students participate in learning with zeal and passion, both in terms of understanding the information offered by the instructor and in terms of understanding the material presented by the teacher. Learning gamification also encourages students to be competitive and tackle problems or challenges in quizzes.

Students are also taught how to work together and dispute with their peers in order to solve challenges.

3.2 Discussion

The results of the study, which were obtained through the distribution of questionnaires, revealed an increase in the percentage of learning motivation indicators in learning that used gamification. Gamification of learning occurs in the distribution of materials as well as in the assessment of learning. Gamification can create a welcoming, enthusiastic learning environment while also instilling a healthy competitive spirit in students. The use of gamification characteristics as a means of learning through a variety of applications. As a learning medium, the application is utilized in online or remote learning.

The findings of this study are important and corroborate the findings of various earlier investigations, including research conducted by Ariessanti et al. (2020); Purwidiantoro & Hadi (2020); Susanti (2021); Parra-González et al. (2021); Martín-Sómer et al. (2021), gamification can increase motivation, student interest, active participation, and student involvement in learning, resulting in meaningful learning and The use of gamification in an app makes learning more motivating for students and increases student engagement.

4. CONCLUSION

Based on the analysis and discussion of the research findings, it can be stated that the use of gamification in learning can improve the learning motivation of fourth-grade students at MIN 3 Jombang, as evidenced by the study's data processing results. The percentage of fourth-grade students at MIN 3 Jombang who scored high on learning motivation increased from cycle I to cycle II, from 77.84 percent to 90.32 percent. Moreover, the average score of fourth-grade students' learning motivation was 77.84 percent in the first cycle, which means it did not reach the study's success requirement of 80 percent. The researcher opted to continue the action to cycle II and received an average score percentage of 90.32 percent, indicating that it has met the research's success requirements of 80%, and so the action is dismissed in cycle II and deemed successful.

As an implication, the use of multimedia has been widely implemented as a result of the findings of this study in the field of learning, starting with the use of text, graphics, animation, video, and audio to stimulate students to enjoy educational materials. Given the importance of intrinsic motivation in learning for students. Gamification provides an option to make the learning process more interesting, engaging, and successful in the learning process.

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