

APPLICATION_OF_THE_GAME_B ASED_LEARNING_MODEL_TO_I NCREASE_STUDENT_LEARNING _PARTICIPATION_IN_PJOK_LEAR. pdf

by ITentix Plagiarism

Submission date: 07-Nov-2025 07:13AM (UTC+0300)

Submission ID: 2806251080

File name:

APPLICATION_OF_THE_GAME_BASED_LEARNING_MODEL_TO_INCREASE_STUDENT_LEARNING_PARTICIPATION_IN_PJOK_LEAR.pdf
(315.11K)

Word count: 3239

Character count: 18532



APPLICATION OF THE GAME BASED LEARNING MODEL TO INCREASE STUDENT LEARNING PARTICIPATION IN PJOK LEARNING AT SMK BHINEKA KARAWANG

¹Nadila Nurul Fauziah, ²Fahrudin, ³Resty Gustiawati, ⁴NenengErnawati

Abstract: This study aims to analyze the effectiveness of the application of the *Game Based Learning* (GBL) model in increasing student involvement during Physical Education, Sports, and Health (PJOK) learning. The type of research used is Classroom Action Research (PTK) which is carried out in one cycle, including the stages of planning, implementation, observation, and reflection. The research subjects were taken from SMK Bhineka Karawang which consisted of 32 students in class X TSM 1 for the 2024/2025 school year. Data was collected through questionnaires and observations to measure student participation in the learning process. The results of the study showed a significant increase in student interest and participation with an average questionnaire score of 4.56 from the Likert scale or equivalent to 90.7% (very good category). These results show that the application of *Game Based Learning* is able to create more active, interesting, and collaborative PJOK learning. So that this model succeeds in increasing student participation during PJOK learning.

Keywords: *Game Based Learning*, Learning Participation, PJOK, Active Learning

Correspondence Address: (Institution Origin)

© Universitas Singaperbangsa Karawang 2025

*Email: fahrudin@fkip.unsika.ac.id

ISSN 2721-5660 (Print)

ISSN 2722-1202 (Online)

Filed : Month, Year	Revision : Month, Year	Accepted : Month, Year	Publish : Month, Year
---------------------	------------------------	------------------------	-----------------------

AUTHOR'S INFORMATION

Phone Number	Affiliate	Country	Email
0812-2399-9295	Universitas Singaperbangsa Karawang	Indonesia	Fauziahnadila49@gmail.com
0813-8750-3675	Universitas Singaperbangsa Karawang	Indonesia	fahrudin@fkip.unsika.ac.id
0857-1186-6548	Universitas Singaperbangsa Karawang	Indonesia	resty.gustiawati@fkip.unsika.ac.id
0878-7288-9111	Universitas Singaperbangsa Karawang	Indonesia	Nenenge616@gmail.com

INTRODUCTION

Education is an important aspect in building the quality of human resources and realizing national goals to educate the nation's life. Through education, students are expected to be able to develop their potential and adapt to dynamic social and technological developments. Because education is a strategic means in shaping a person's personality (Sari, 2023);¹⁹ Nurfatimah et al., (2022) emphasizing that education is a human effort to realize a meaningful quality of life.²¹ quality of education in Indonesia is still facing various challenges, especially in terms of the effectiveness of the learning process. Dzaky Satria et al., (2025) stated that the low quality of education is generally caused by internal and external factors, including the lack of interest and motivation to learn from students, the performance of educators that is not optimal, and the limitations of learning support facilities and infrastructure. The level of interest of students in the learning process has a significant correlation with their level of participation in learning activities. In line with this, Nurjanah, Suci Sugiharti et al., (2025) emphasized that interest in learning is the main determinant in encouraging student involvement. Learning that takes place in a monotonous and less interesting manner tends to reduce enthusiasm and cause students to become passive in participating in learning activities. This condition is caused by the lack of innovation in learning methods that are able to foster active student involvement during the learning process. These obstacles are also seen in the subjects of Physical Education, Sports, and Health (PJOK). Ideally, PJOK serves to foster physical fitness while developing students' social and emotional skills.

However, the reality is that PJOK learning in many schools is still included in SMK Bhineka Karawang dominated by conventional methods that are instructive and teacher-centered. As a result, students tend to be passive and less enthusiastic in participating in learning activities (Xie, 2021). This shows the importance of implementing a more participatory and fun learning model so that PJOK learning objectives can be achieved optimally. as expressed by Aditya Ramadhan, (2024), a fun and interactive learning process is the main key in optimizing the potential of students. Therefore, it is necessary to update the learning strategy that not only focuses on the delivery of material, but is also able to foster motivation, enthusiasm, and active involvement of students.

One approach that is relevant to these needs is the *Game Based Learning* (GBL). This model emphasizes the use of game elements in learning activities to increase student engagement, motivation, and understanding of concepts. According to Bhat et al., (2023), *Game Based Learning* able to create an interactive and challenging learning environment, thereby encouraging students to be active in every learning activity. In addition, research by Putri et al., (2025), The application of the *Game Based Learning* model has been shown to improve critical thinking skills, team collaboration, and active involvement of students in the learning process. Daryanes & Ririen, (2020), adding that *Game Based Learning* Provide opportunities for students to actively participate in understanding, assessing, and applying the knowledge gained through game activities. This approach places students as active learning subjects, not just recipients of information, so that the learning process becomes more contextual and meaningful. In the context of PJOK subjects, the application of *Game Based Learning* is considered very appropriate because it involves elements of movement, teamwork, and strategies that naturally encourage active involvement of students in every learning activity.

Based on this background,¹ this study aims to analyze the application of the *Game Based Learning* model in increasing student learning participation in PJOK learning. The focus of the research is directed at how the GBL model is able to create a more active, collaborative, and meaningful learning atmosphere for students in class X of TSM 1 SMK Bhineka Karawang. So the author carried out a research entitled "The Application of the *Game Based Learning* Model to Increase Student Learning Participation in Pjok Learning"

METHOD

This research uses the Classroom Action Research (PTK) approach, which is also known as Classroom Action Research (CAR). PTK was chosen because it allows researchers and teachers work directly together in improving the learning process through systematic reflective actions. Each cycle consists of the stages of planning, implementing actions, observation, and reflection (Purba et al., 2023). The research was carried out at SMK Bhineka Karawang, West Java, in the even semester of the 2024/2025 school year. The subjects of the study were 32 students of class X TSM 1, consisting of 31 male students and 1 female student. The selection of subjects was carried out purposively because this class showed low learning participation in PJOK learning before the action was taken.

To measure student learning outcomes in PJOK learning that applies game-based methods, researchers collect data through cognitive tests, questionnaires, observations, interviews, and documentation. The questionnaire instrument was used to assess the level of student learning participation in the application of the Game Based Learning model, while the cognitive test functioned to measure the achievement of student learning outcomes after participating in the learning process. The questionnaire consisted of 15 statements with three assessment categories, namely yes (5 points), ordinary (3 points), and no (1 point). The instruments were prepared based on the adaptation of the research (Nurningtias & Majid, 2022), with adjustments to the PJOK learning context. In addition to questionnaires, observation techniques are used to record students' involvement during learning activities, including interaction, cooperation, and enthusiasm for game activities. Interviews were conducted to obtain in-depth information about students' perceptions of game-based learning, while documentation was used to complete data in the form of photos of activities and teachers' notes during the study.

Data analysis was carried out descriptively, quantitatively, and qualitatively. Quantitative data from the results of the questionnaire was calculated using three assessment categories to obtain the average and percentage of student learning participation. Qualitative data from observation and interview results were analyzed thematically to find patterns of student involvement during learning (Zulfqar et al., 2024). The results of these two analyses were used to assess the effectiveness of the model's application *Game Based Learning* in increasing student learning participation in PJOK subjects.

RESULT

This research was carried out at SMK Bhineka Karawang, which is located in Karawang Regency, West Java Province. The subject of the study is students of class X TSM 1 in the 2024/2025 school year, with a total of 32 students consisting of boys and girls. The method used in this study is Classroom Action Research (PTK). (Arikunto, 2021), explained that PTK is a form of research that aims to examine and improve the learning process through real actions carried out in the classroom. The PTK design in this study refers to the model developed by Kemmis and McTaggart, which includes four main stages, namely: (a) planning, (b) implementation of actions, (c) observation, and (d) reflection. This research was carried out in one learning cycle that included two meetings, with the application of game-based learning media as a means to increase student learning participation in PJOK subjects, especially in floor gymnastics and basketball games. The main focus of the research is to find out the extent to which the application of the Game Based Learning (GBL) model can increase student learning participation in Physical Education, Sports, and Health (PJOK) subjects.

1. Planning

The planning stage begins with coordination between researchers and PJOK teachers to identify learning problems that arise in the classroom. Based on the results of initial observations, it was found that student participation in PJOK learning is still low, especially in floor gymnastics activities and basketball games. Therefore, the researcher developed a strategy for the implementation of the Game Based Learning model by adjusting the characteristics of students

and school conditions. Planning includes the preparation of a game-based Learning Implementation Plan (RPP), determination of interactive media such as scoreboards, motion activity cards, and digital quizzes based on Wordwall and Quiziz. Observation instruments and learning participation questionnaires were also prepared to obtain objective data on changes in student behavior during the action.

2. Implementation of Actions

The implementation of the action was carried out in two meetings. The first meeting focused on learning floor gymnastics using group game activities. Students are divided into small groups and complete basic movement challenges such as front and back rolls using motion activity cards. Each group collects points based on the accuracy of the moves and the answers of the digital quiz.

The second meeting applied GBL in learning basketball games through competitive mini-games such as dribbling, zig-zag, relay, and shooting challenge. Teachers utilize the Quiziz platform to provide interactive questions around basic techniques and game rules. Symbolic awards in the form of snacks and additional points are given to increase student motivation. During both meetings, the teacher acted as a facilitator and motivator, while the researcher observed the learning process to assess student involvement in the activity.

3. Observation

Observations were made during the learning process with a focus on aspects of student participation, cooperation, and enthusiasm. The results of the observation showed a significant increase in student engagement compared to before the action. Students seem to be actively interacting, dare to try new moves, and show high enthusiasm in completing each game challenge.

Student participation also increases in non-physical forms, such as asking questions, discussing, and providing support to group mates. Peer teachers noted that the classroom atmosphere became more lively and conducive, with most students engaging consistently in each activity session.

4. Reflection

The results of reflection show that the application of the Game Based Learning model has a positive impact on student learning participation. Students find learning to be more interesting and challenging because it is packaged in the form of games. The teacher stated that this method makes it easier to manage the classroom and fosters the enthusiasm of students who were previously passive. Overall, the average score of student participation based on the results of the questionnaire reached 4.56 or 90.7%, which is in the very good category. These findings show a marked increase in students' physical, emotional, and social engagement during learning activities.

Table 1. Average Student Learning Participation Results after the Implementation of Game Based Learning

Yes	Participation Indicators	Average	Classification
1	The spirit of participating in PJOK learning	4,87	Excellent
2	Fun against game-based methods	4,68	Excellent
3	Understanding of floor gymnastics and basketball techniques	4,25	Excellent
4	Activeness in cooperation and competition	4,62	Excellent
5	Focus and motivation during learning	4,43	Excellent
	Overall average	4,56	Excellent
	Percentage	90,7%	Excellent

DISCUSSION

The results of this study show that the application of the Game Based Learning (GBL) model is effective in increasing student learning participation in PJOK learning. The implementation of

GBL has been proven to encourage active student involvement through elements of competition, challenges, and awards. These findings are in line with research Cahya Susaniari & Santosa, (2024) which states that game-based learning can increase student motivation and activeness because it creates a fun and interactive learning environment.

In addition, learning with a game approach allows students to learn through hands-on experience. Activities such as dribble challenges and shooting relays help students understand basic movement techniques through practice, not just theoretical explanations. This supports the results of the search Fadhli et al., (2023), which affirms that game-based learning (GBL) contributes to the development of critical thinking and problem-solving skills, as well as increases student engagement due to the elements of practical and interactive activities.

From the teacher's side, the implementation of GBL provides an opportunity to innovate and adapt learning strategies to the needs of students. Teachers are no longer the only source of information, but play the role of facilitators who guide the experiential learning process. Erwinsyah et al., (2020) explained that interactive learning like this has a positive effect on teachers' self-efficacy and improves class dynamics.

Thus, the results of this study strengthen the evidence that Game Based Learning is an effective strategy in increasing student learning participation in PJOK learning. This model aligns with the direction of 21st-century learning that emphasizes active engagement, collaboration, and problem-solving through meaningful learning experiences (Zahroh et al., 2023).

CONCLUSION

The classroom action research conducted at SMK Bhineka Karawang shows that the application of the Game Based Learning (GBL) model can increase student learning participation in Physical Education, Sports, and Health (PJOK) learning. Through the application of GBL to floor gymnastics materials and basketball games, students show significant improvements in physical, emotional, and social engagement. The average results of the learning participation questionnaire reached 4.56 or 90.7%, which is included in the very good category. Students become more enthusiastic, actively cooperate, and show high motivation during the activity. Teachers also experience increased creativity and ease in managing more fun and interactive learning. Thus, Game Based Learning has proven to be an effective alternative learning model to improve PJOK participation and learning quality in vocational high schools.

Suggestion

For PJOK teachers, it is recommended to apply the Game Based Learning model as a variation of learning strategies that are able to increase student motivation, participation, and enthusiasm for learning. Teachers can adjust the form of the game to the characteristics of the material and the condition of the school facilities. Then for the School, it is necessary to support the implementation of innovative game-based learning by providing supporting facilities such as practice rooms, interactive media, and access to learning technology. And for further research, it is hoped that it can expand the application of Game Based Learning to other PJOK materials, or examine its influence on other aspects such as learning outcomes, teamwork, and student sportsmanship.

REFERENCE

- Aditya Ramadhan. (2024). THE ROLE OF TEACHERS IN DEVELOPING STUDENTS' POTENTIAL. *Tarbiyah bil Qalam : Journal of Religious Education and Science*, 8(1). <https://doi.org/10.58822/tbq.v8i1.198>
- Arikunto, S. (2021). *Basics of educational evaluation edition 3*. The Earth of Scripts. [https://books.google.co.id/books?hl=en&lr=&id=j5EmEAAAQBAJ&oi=fnd&pg=PA1&dq=Suharsimi+Arikunto,+Dasar-Dasar+Evaluasi+Pendidikan,\(Jakarta:+Earth+Aksara,+2013\),+h.+326&ots=6uzPKerHWI&](https://books.google.co.id/books?hl=en&lr=&id=j5EmEAAAQBAJ&oi=fnd&pg=PA1&dq=Suharsimi+Arikunto,+Dasar-Dasar+Evaluasi+Pendidikan,(Jakarta:+Earth+Aksara,+2013),+h.+326&ots=6uzPKerHWI&)

sig=whysODEIjvaB09jx7bcftFjMiQ&redir_esc=y#v=onepage&q&f=false

- Bhat, A. Z., Ahmed, I., Kameswari, L., & Khan, M. S. (2023). A Game Based Innovative teaching and learning environment to enhance progression and performance of students. *SHS Web of Conferences*, 156, 01001. <https://doi.org/10.1051/shsconf/202315601001>
- Cahya Susaniari, N. K. A., & Santosa, M. H. (2024). A Systematic Review on The Implementation of Game-based Learning to Increase EFL Students' Motivation. *Journal of English Language and Education*, 9(6), 77–87. <https://doi.org/10.31004/jele.v9i6.520>
- Daryanes, F., & Ririen, D. (2020). The Effectiveness of Using the Kahoot Application as an Evaluation Tool for Students. *Journal of Natural Science and Integration*, 3(2), 172. <https://doi.org/10.24014/jnsi.v3i2.9283>
- Dzaky Satria, Ihsan Utama Kusasih, & Gusmaneli Gusmaneli. (2025). Analysis of the Low Quality of Education in Indonesia Today: A Literature Review. *Journal of Bintang Pendidikan Indonesia*, 3(2), 292–309. <https://doi.org/10.55606/jubpi.v3i2.3838>
- Erwinsyah, A., Pratiwi, W., & Pautina, A. R. (2020). Self-efficacy, teaching experience, facility support, pedagogic, and professional development of teachers in the use of computer technology. *Irfani*, 16(2), 62–69.
- Fadhli, M., Kuswandi, D., Utami, P. S., Sartika, S. B., & Mohamad Hardyman bin Barawi. (2023). Game-Based Learning and Children's Digital Literacy to Support Pervasive Learning: A Systematic Review. *Journal of Educational Technology*, 25(3), 386–393. <https://doi.org/10.21009/jtp.v25i3.38388>
- Nurfatimah, S. A., Hasna, S., & Rostika, D. (2022). Building the Quality of Education in Indonesia in Realizing the Sustainable Development Goals (SDGs) Program. *Journal of Basicedu*, 6(4), 6145–6154. <https://doi.org/10.31004/basicedu.v6i4.3183>
- Nurjanah, Suci Sugiharti and Rahayu, Fanny Septiany and Nurindah, Putri Berliana and Azhahra, R. A. (2025). The Application of Wordwall Learning Media in Increasing Students' Learning Interest in PKN Subjects in Grade 4 SDN 1 Arjawinangun. *J-CEKI: Journal of Scientific Scholars*, 4(3), 2120–2129. <https://doi.org/https://doi.org/10.56799/jceki.v4i3.8137>
- Nurningtias, R. A., & Majid, N. W. A. (2022). Gamification as an increase in the knowledge and participation of elementary school students. *Journal of Mathematical Education Thought and Research (Jp3M)*, 5(2), 60–69.
- Purba, M., Syafitri, R., & Nurzanah, R. (2023). *The Urgency of Classroom Action Research for Teachers in Learning*.
- Putri, M. A., Herpratiwi, H., & Firdaus, R. (2025). The Influence of Game Based Learning on Student Motivation in the Digital Era: Literature Review. *Journal of Educational Technology: Journal of Learning Research and Development*, 10(1), 122. <https://doi.org/10.33394/jtp.v10i1.13814>
- Sari, N. H. (2023). Personality formation through Islamic religious education. *At-Ta'lim: Studies in Islamic Religious Education*, 5(11).
- Xie, J. (2021). The Effects of Boredom on EFL Learners' Engagement. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.743313>
- Zahroh, U., Rachmawati, N. I., Darmayanti, R., & Tantrianingrum, T. (2023). "Guidelines" for collaborative learning in 21st century education at Madrasah Tsanawiyah. *Assyfa Journal of Islamic Studies*, 1(2). <https://doi.org/10.61650/ajis.v1i2.239>
- Zulfqar, A., Hussain, B., & Tufail, M. S. (2024). From Global Insights to Local Applications:

Analyzing Student Engagement Strategies for Pakistani Higher Education. *Journal of Educational Research and Social Sciences Review (JERSSR)*, 4(2), 34–47.

APPLICATION_OF_THE_GAME_BASED_LEARNING_MODEL_TO...

ORIGINALITY REPORT

15%

SIMILARITY INDEX

10%

INTERNET SOURCES

11%

PUBLICATIONS

4%

STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Universitas Negeri Manado Student Paper	2%
2	journal.actual-insight.com Internet Source	2%
3	Ni Kadek Anggi Cahya Susaniari, Made Hery Santosa. "A Systematic Review on The Implementation of Game-based Learning to Increase EFL Students' Motivation", Journal of English Language and Education, 2024 Publication	1%
4	journal.lifescifi.com Internet Source	1%
5	A K Hermansyah, Y Tembang, U Yampap, A D Elu. "Improving science learning outcomes material for the healthy and unhealthy environment through a contextual learning model", IOP Conference Series: Earth and Environmental Science, 2019 Publication	1%
6	Viena Juliana, Solihin Sidik. "Pengaruh perputaran kas dan perputaran piutang terhadap profitabilitas pada perusahaan pertambangan subsektor batubara yang terdaftar di Bursa Efek Indonesia periode 2016-2019", Akuisisi: Jurnal Akuntansi, 2020 Publication	1%
7	jurnal.unimed.ac.id	

1 %

8

journal.assyfa.com

Internet Source

1 %

9

Abdul Rifa'i, Siti Maryam Munjiat. "An Analysis of the Impact of Project-Based Learning on Students' Creative Thinking in Islamic Education Classrooms", Tribakti: Jurnal Pemikiran Keislaman, 2025

Publication

1 %

10

Indra Primahardani. "Self-Efficacy of Social Science Education Teacher Candidates on Participating in Online Learning During the Covid-19 Pandemic", AL-ISHLAH: Jurnal Pendidikan, 2022

Publication

1 %

11

ejournal.iainkendari.ac.id

Internet Source

<1 %

12

Kaswari Kaswari, Tahmid Sabri, Mastar Asran, Endang Uliyanti. "Workshop of Classroom Action Research with The Elementary School Teachers", JPKM (Jurnal Pengabdian Kepada Masyarakat) UNTAN, 2018

Publication

<1 %

13

Safuri Musa, Yusuf Muhyiddin, Siswanto Siswanto, Sri Nurhayati. "Pemahaman Mitigasi COVID-19 di Pendidikan Nonformal", Society, 2022

Publication

<1 %

14

journal1.uad.ac.id

Internet Source

<1 %

15

jurnal.unugha.ac.id

Internet Source

<1 %

16 Maila D.H. Rahiem. "Towards Resilient Societies: The Synergy of Religion, Education, Health, Science, and Technology", CRC Press, 2025

Publication

<1 %

17 Sierra Adare-Tasiwoopa ápi. "Gamify Your College Classroom - Strategies to Foster Critical Thinking and Life Skills Across Disciplines", Routledge, 2025

Publication

<1 %

18 ojs.mahadewa.ac.id

Internet Source

<1 %

19 prosiding.stkippacitan.ac.id

Internet Source

<1 %

20 Hikmawati Hikmawati, Muhammad Taufik, Jannatin Ardhuha, Satutik Rahayu, Irman Muliadi. "Multiple Intelligence Type Profile of Prospective Physics Teacher Students: Recommendations for Lecture Methods to Create a Superior and Globally Competitive Generation", Kappa Journal, 2024

Publication

<1 %

21 Subhan Zein, Fuad Abdul Hamied. "The Routledge International Handbook of English Language Education in Indonesia", Routledge, 2025

Publication

<1 %

22 journal.my-iela.id

Internet Source

<1 %

23 www.jele.or.id

Internet Source

<1 %

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	On		