

Improving Students' Learning Outcomes in the Candle Position through Balance Learning Activities in Floor Gymnastics among Fourth-Grade Students at SDN 37 Mataram

Hardiyanti^{1*}, Mujriah², Fadli Zainuddin³

*Corresponding Author: Mujri, e-mail: mujriah@undikma.ac.id

¹Physical Education and Health Study Program, Faculty of Sport, Health, and Community Sciences, Universitas Pendidikan Mandalika, Mataram, Indonesia

Abstract

Objectives: This study aimed to improve students' learning outcomes in performing the candle position in floor gymnastics through the implementation of balance learning activities among fourth-grade students at SDN 37 Mataram in the 2022/2023 academic year.

Materials and Methods: This study used classroom action research conducted in two cycles, following four stages in each cycle: planning, action, observation, and reflection. The participants were 26 fourth-grade students at SDN 37 Mataram, consisting of 10 boys and 16 girls. Data were collected using observation sheets, written tests, and practical skill assessments. The learning outcome data were analyzed descriptively by calculating the number and percentage of students who achieved the minimum mastery criterion.

Results: The results showed a gradual improvement in students' learning outcomes from the pre-cycle to Cycle I and Cycle II. In the pre-cycle stage, only 8 students, or 31%, achieved the mastery criterion, while 18 students, or 69%, had not yet achieved mastery. In Cycle I, the number of students who achieved mastery increased to 11 students, or 42%, while 15 students, or 58%, remained incomplete. In Cycle II, the number of students who achieved mastery increased significantly to 22 students, or 85%, while only 4 students, or 15%, had not yet achieved mastery.

Conclusions: The implementation of balance learning activities improved students' learning outcomes in the candle position in floor gymnastics. The improvement was shown by the increase in mastery learning from 31% in the pre-cycle to 42% in Cycle I and 85% in Cycle II. Therefore, balance learning activities can be used as an effective instructional strategy to help elementary school students perform the candle position more confidently, safely, and correctly.

Keywords: learning outcomes; candle position; floor gymnastics; balance learning; physical education

Introduction

Education is a lifelong process that supports the development of human potential physically, mentally, socially, and morally (Cropley, 2014). In the Indonesian education system, education is defined as a conscious and planned effort to create a learning environment and learning process that enables students to actively develop their potential, including spiritual strength, self-control, personality, intelligence, noble character, and skills needed for themselves, society, nation, and state (Sakhiyya & Rahmawati, 2024).



Physical Education, Sports, and Health is an essential component of education because it provides students with direct learning experiences through selected physical activities, sports, and health-related practices. Physical education does not merely aim to train students to master certain sports skills. More importantly, it supports the development of movement competence, physical fitness, critical thinking, social skills, moral action, healthy lifestyle habits, and positive attitudes toward lifelong physical activity (Pasek et al., 2020).

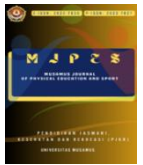
One of the learning materials in elementary school physical education is floor gymnastics. Floor gymnastics includes a variety of movements that require strength, flexibility, coordination, courage, and balance. Among these movements, the candle position is one of the basic floor gymnastics skills taught to students. The candle position requires students to lift both legs upward while supporting the body with the shoulders, back, arms, and hands. This movement requires balance, body control, core strength, arm support, and confidence (Yuwono et al., 2020).

In practice, many students experience difficulty performing the candle position correctly. Based on initial observations at SDN 37 Mataram, several students had limited understanding of the basic techniques of the candle position. Students often found it difficult to lift their legs upward, maintain body balance, and keep their body position stable. Some students also felt afraid of falling or being injured, which affected their confidence during the learning process.

These problems indicate that students need an appropriate learning approach that can help them gradually develop balance, confidence, and movement control. Balance learning activities are considered suitable because the candle position depends heavily on students' ability to control body position and maintain stability. By applying balance-based learning activities, students are expected to become more familiar with body control, reduce fear, and improve their ability to perform the candle position.

Previous studies have also shown that the use of appropriate learning methods, movement assistance, and modified learning activities can improve students' learning outcomes in floor gymnastics. (Kuswoyo & Wasa, 2021) found that learning media could help students improve their basic candle position movement. Similarly, (Bhat et al., 2022) reported that peer assistance could improve students' learning outcomes in the candle position. These findings suggest that instructional innovation is important in helping students master floor gymnastics skills.

Based on this background, this study aimed to improve students' learning outcomes in the candle position in floor gymnastics by implementing balance learning activities among fourth-grade students at SDN 37 Mataram in the 2022/2023 academic year.



Materials and Methods

Study Design

This study used classroom action research. Classroom action research is a reflective research approach conducted by teachers or researchers in the classroom to improve the quality of learning and student outcomes. According to (Arikunto, 2010), classroom action research consists of four main stages: planning, action, observation, and reflection. This study was conducted in two cycles. Each cycle involved planning the learning activities, implementing the action, observing the learning process, and reflecting on the results to determine improvements for the next cycle.

Study Participants

The participants were 26 fourth-grade students at SDN 37 Mataram in the 2022/2023 academic year. The class consisted of 10 boys and 16 girls. The participants were selected because they experienced difficulties in learning the candle position in floor gymnastics.

Study Organization

The study was conducted at SDN 37 Mataram from July 24 to August 7, 2023. The learning activities were carried out in three stages: pre-cycle, Cycle I, and Cycle II. Each meeting was conducted during physical education class with an allocation of three lesson hours. The instruments used in this study consisted of observation sheets, written tests, and practical skill assessments. The observation sheet was used to assess students' affective behavior and participation during learning. The written test was used to assess students' cognitive understanding of the candle position. The practical skill test was used to assess students' psychomotor performance in performing the candle position.

The learning action was implemented through balance learning activities. The activities were designed to help students develop body control, confidence, and stability before performing the full candle position. The teacher provided demonstrations, guided practice, feedback, and motivation during the learning process.

In Cycle I, the learning activities focused on introducing balance exercises and helping students understand the basic movement pattern of the candle position. Reflection from Cycle I was then used to improve the learning process in Cycle II, especially by giving more individual guidance, encouraging student participation, and providing clearer movement instructions.

Statistical Analysis

The data were analyzed using descriptive quantitative analysis. Students' learning outcomes were calculated based on the number and percentage of students who achieved the minimum mastery criterion. The improvement in learning outcomes was compared across the pre-cycle, Cycle I, and Cycle II.

Results

Pre-Cycle

Table 1. Students' Learning Outcomes in the Pre-Cycle

Description	Result
Total score	510.6
Mean score	19.6
Highest score	25
Lowest score	16.6
Students achieving mastery	8
Students not achieving mastery	18
Percentage of mastery	31%
Percentage of non-mastery	69%

The pre-cycle assessment was conducted to determine students' initial ability in performing the candle position. The results showed that only 8 students achieved the mastery criterion, while 18 students had not yet achieved mastery. The results indicate that students' initial learning outcomes in the candle position were still low. Most students were unable to perform the candle position correctly, especially in the phases of lifting the legs, maintaining balance, and holding the final position.

Cycle I

Table 2. Students' Learning Outcomes in Cycle I

Description	Result
Total score	582.2
Mean score	22.4
Highest score	25.2
Lowest score	18
Students achieving mastery	11
Students not achieving mastery	15
Percentage of mastery	42%
Percentage of non-mastery	58%

The results of Cycle I showed an improvement in students' learning outcomes. However, the percentage of mastery had not yet reached the expected success indicator. Some students were still



hesitant and lacked confidence when performing the candle position. Therefore, the learning process was continued to Cycle II.

Based on the observation and reflection in Cycle I, several points were identified. First, the teacher needed to supervise students more actively during practice. Second, students needed more encouragement and motivation to participate confidently. Third, several students were still afraid of performing the movement. Fourth, the researcher needed to provide more careful guidance and correction during the learning process.

These reflections were used to improve the learning process in Cycle II. The teacher provided clearer demonstrations, gave more individual feedback, and created a more enjoyable and supportive learning atmosphere.

Cycle II

Table 3. Students' Learning Outcomes in Cycle II

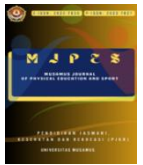
Description	Result
Total score	629.8
Mean score	24.22
Highest score	25.4
Lowest score	22
Students achieving mastery	22
Students not achieving mastery	4
Percentage of mastery	85%
Percentage of non-mastery	15%

The results of Cycle II showed that 22 students, or 85%, achieved the mastery criterion, while 4 students, or 15%, had not yet achieved mastery. Since the percentage of mastery exceeded the expected success indicator of 75%, the classroom action research was considered successful.

Summary of Learning Outcome Improvement

Table 4. Improvement in Students' Learning Outcomes across Cycles

Stage	Students Achieving Mastery	Students Not Achieving Mastery	Mastery Percentage
Pre-cycle	8	18	31%
Cycle I	11	15	42%
Cycle II	22	4	85%



The results show a clear improvement in students' learning outcomes across the three stages. The percentage of mastery increased from 31% in the pre-cycle to 42% in Cycle I and then to 85% in Cycle II. This improvement indicates that balance learning activities were effective in improving students' ability to perform the candle position in floor gymnastics.

Discussion

The results of this study show that the implementation of balance learning activities improved students' learning outcomes in the candle position. Before the action was implemented, only 31% of students achieved mastery. This indicates that most students still had difficulty performing the candle position, particularly in lifting the legs, maintaining balance, and holding the body position correctly.

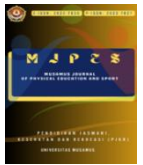
After the implementation of balance learning activities in Cycle I, the percentage of mastery increased to 42%. This improvement shows that balance-based activities began to help students understand and practice the movement more effectively. However, the improvement was not yet optimal because several students were still hesitant and afraid of performing the movement. This condition is common in floor gymnastics learning because students may feel anxious when they are required to perform movements involving body inversion, balance, and body support.

In Cycle II, the percentage of mastery increased significantly to 85%. This finding indicates that repeated practice, teacher guidance, demonstration, and balance activities helped students become more confident and capable of performing the candle position. The improvement also suggests that learning activities that are gradually structured can help students overcome fear and improve movement control.

These findings are consistent with (Nurhuda, 2017), who reported that instructional assistance in floor gymnastics could improve students' learning outcomes in the candle position. Similarly, (Hasanah Lubis et al., 2023) found that the use of supportive learning media helped students improve their basic candle position movement. These studies support the idea that students need appropriate learning strategies, assistance, and practice opportunities to master floor gymnastics skills.

The results are also in line with (Rindawan & Mulyajaya, 2016), who emphasized that the candle position requires arm strength, abdominal strength, balance, and body coordination. Therefore, balance learning activities are relevant because they directly support the physical and technical requirements of the candle position. When students develop better body control and balance, they are more likely to perform the movement correctly.

Furthermore, the improvement in students' learning outcomes can be explained by the role of active and enjoyable learning. Physical education learning should provide students with meaningful movement experiences that allow them to participate actively and confidently. (Setiawan et al., 2020)



stated that learning outcomes in elementary school physical education are influenced by students' motor skills and the learning model used by the teacher. Therefore, the use of balance learning activities in this study helped create a more effective learning process.

The increase from 31% to 85% also shows that classroom action research can be an effective approach for solving practical learning problems in physical education. Through the stages of planning, action, observation, and reflection, the teacher and researcher were able to identify problems in Cycle I and improve the learning process in Cycle II. This is consistent with Arikunto's concept of classroom action research, which emphasizes continuous improvement through reflective cycles.

Overall, the findings suggest that balance learning activities can improve students' psychomotor performance, confidence, and participation in floor gymnastics learning. The candle position is not only a technical movement, but also a movement that requires courage and trust in body control. Therefore, teachers should provide progressive exercises, clear demonstrations, safety guidance, and positive reinforcement to help students perform the movement safely and effectively.

Conclusions

Based on the results of the study, it can be concluded that the implementation of balance learning activities improved students' learning outcomes in the candle position in floor gymnastics among fourth-grade students at SDN 37 Mataram in the 2022/2023 academic year.

The improvement was shown by the increase in the percentage of students who achieved mastery. In the pre-cycle stage, only 8 students, or 31%, achieved mastery. In Cycle I, the number increased to 11 students, or 42%. In Cycle II, the number increased significantly to 22 students, or 85%. Since the mastery percentage in Cycle II exceeded the expected success indicator, the action was considered successful.

Therefore, balance learning activities can be used as an effective learning strategy to improve students' ability to perform the candle position. Physical education teachers are encouraged to apply progressive, enjoyable, and safety-oriented balance activities to help students develop confidence, body control, and correct movement technique in floor gymnastics.

References

- Arikunto, S. (2010). Arikunto, S. (2010). *Prosedur Penelitian: Suatu Pendekatan Praktik* (Edisi Revi). PT. Rineka Cipta. *Prosedur Penelitian: Suatu Pendekatan Praktik* (Edisi Revi). PT. Rineka Cipta.
- Bhat, N., Gurung, S., Gupta, M., Dhungana, N., & Thapa, R. K. (2022). Enhancing collaborative learning through peer-assisted learning. *Journal of Physiological Society of Nepal*, 3(1), 4–9. <https://doi.org/10.3126/jpsn.v3i1.57762>



- Cropley, A. J. (2014). *Lifelong Education: A Psychological Analysis*. Elsevier.
- Hasanah Lubis, L., Febriani, B., Fitra Yana, R., Azhar, A., & Darajat, M. (2023). The Use of Learning Media and its Effect on Improving the Quality of Student Learning Outcomes. *International Journal Of Education, Social Studies, And Management (IJESSM)*, 3(2), 7–14. <https://doi.org/10.52121/ijessm.v3i2.148>
- Kuswoyo, D. D., & Wasa, C. (2021). Jump Game Development as a Media in Improving Rough Motoric of The Kindergarten Students in Malind District-Merauke. *ACTIVE: Journal of Physical Education, Sport, Health and Recreation*, 10(1), 1–4. <https://journal.unnes.ac.id/sju/peshr/article/view/42625>
- Nurhuda, N. (2017). Upaya Meningkatkan Hasil Belajar Sikap Lilin Dalam Pembelajaran Senam Lantai Melalui Bantuan Teman Pada Peserta Didik SD Negeri 9 Pekanbaru Tahun Ajaran 2016/2017. *Journal Sport Area*, 2(2), 76–87. [https://doi.org/10.25299/sportarea.2017.vol2\(2\).607](https://doi.org/10.25299/sportarea.2017.vol2(2).607)
- Pasek, M., Szark-Eckardt, M., Wilk, B., Zuzda, J., Żukowska, H., Opanowska, M., Kuska, M., Drózdź, R., Kuśmierczyk, M., Sakłak, W., & Kupcewicz, E. (2020). Physical Fitness as Part of the Health and Well-Being of Students Participating in Physical Education Lessons Indoors and Outdoors. *International Journal of Environmental Research and Public Health*, 17(1), 309. <https://doi.org/10.3390/ijerph17010309>
- Rindawan, R., & Mulyajaya, M. S. (2016). Hubungan Kekuatan Otot Lengan Dan Kekuatan Otot Perut Dengan Kemampuan Melakukan Sikap Lilin Pada Senam Lantai Siswa Kelas Viii Smpn 4 Praya Tengah Tahun Pelajaran 2015/2016. *Jurnal Ilmiah Mandala Education*, 2(2), 230–236. <https://doi.org/10.58258/jime.v2i2.112>
- Sakhiyya, Z., & Rahmawati, Y. (2024). Overview of Education in Indonesia. In *International Handbook on Education in Southeast Asia* (pp. 277–301). Springer, Singapore. https://doi.org/10.1007/978-981-16-8136-3_27-1
- Setiawan, A., Yudiana, Y., Ugelta, S., Oktriani, S., Budi, D. R., & Listiandi, A. D. (2020). Hasil Belajar Pendidikan Jasmani dan Olahraga Siswa Sekolah Dasar: Pengaruh Keterampilan Motorik (Tinggi) dan Model Pembelajaran (Kooperatif). *TEGAR: Journal of Teaching Physical Education in Elementary School*, 3(2), 59–65. <https://doi.org/10.17509/tegar.v3i2.24513>
- Yuwono, C., Rahayu, T., Sulaiman, S., & Rustiadi, T. (2020). Physical Education Learning Model for Floor Gymnastics and Rhythmic Activities for Lower Grade Class Primary School Students with Teaching Personal Social Responsibility (TPSR). *Proceedings of the Proceedings of the 5th International Conference on Science, Education and Technology, ISET 2019, 29th June 2019, Semarang, Central Java, Indonesia. Proceedings of the 5th International Conference on Science, Education and Technology, ISET 2019, 29th June 2019, Semarang, Central Java, Indonesia, Semarang, Indonesia.* <https://doi.org/10.4108/eai.29-6-2019.2290393>