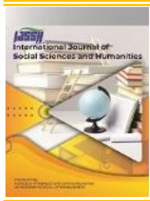

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Problem-Based Learning Model Based on Sustainable Development Goals in School Field Introduction Program

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Abstract

This study aims to describe the implementation of the Problem Based Learning model on circular motion material based on Sustainable Development Goals in the School Field Introduction Program as part of the Impact Campus Program. The study used a quantitative descriptive approach implemented at SMA Negeri 7 Mataram in the odd semester of the 2025/2026 academic year. The research subjects consisted of 33 students of grade XI Phase F. Data collection was carried out through essay tests and observations. The research instruments included tests based on Higher Order Thinking Skills at the level of analyzing, evaluating, and creating, as well as observation sheets for aspects of attitudes and skills. Data were analyzed using descriptive statistics through the calculation of averages, percentages, and interpretation of learning outcome categories. The results showed that the implementation of problem-based learning had a positive impact on student learning outcomes in the aspects of knowledge, attitudes, and skills, all of which were in the very good category. Students showed development in higher-order thinking skills, character strengthening according to the Pancasila Student Profile, and science process skills. The research findings show that problem-based learning is able to create active, contextual, and meaningful physics learning, while also representing the real implementation of the Impact Campus Program in supporting quality and sustainable education.

Contents

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Introduction

Global changes during the industrial revolution and the development of digital technology have had significant consequences for education. Schools no longer serve merely as a place to transfer knowledge, but also as a space for competency development that can equip students to face the challenges of life, the social environment, and the needs of the future world of work (Hikmawati, Sofiya, et al., 2024). In this context, the United Nations Sustainable Development Goals agenda places education as one of the main foundations of sustainable development. Through Sustainable Development Goal 4 (Quality Education), all countries are encouraged to provide quality, inclusive education that can build students' competencies comprehensively (Ağaoğlu & Demir, 2020). Quality education is measured not only by academic achievement, but also by students' abilities to think critically, solve problems, collaborate, communicate, and adapt to change (Murdianto, 2025).

Furthermore, good quality education also contributes to the achievement of Sustainable Development Goal 8 (Decent Work and Economic Growth), which emphasizes the importance of developing productive, innovative human resources who are ready to face global economic challenges. Problem-solving, decision-making, creativity, and collaboration skills developed since secondary education are crucial for shaping a competitive and adaptive generation (Hayati et al., 2024). Therefore, learning in schools needs to be designed to integrate mastery of academic concepts with the development of 21st-century skills, so that students are not only prepared for academic evaluations but also ready to face real-life challenges in their social and professional lives (Hernawati et al., 2024).

In physics learning, a common challenge is how to provide learning experiences that connect scientific concepts with real-world phenomena. One topic that requires conceptual and mathematical analysis skills is circular motion. This material includes important concepts such as period, frequency, angular velocity, linear velocity, centripetal acceleration, and centripetal force. These concepts are directly related to various phenomena in everyday life, such as the rotation of a vehicle wheel, the motion of a propeller, the trajectory of a satellite, industrial machinery, and modern transportation technology (Verawati et al., 2019). However, many students have difficulty understanding the relationships between variables in this material due to the abstract nature of the concepts and the need for high-level reasoning skills. Learning that only focuses on theoretical explanations and solving routine problems is often insufficient to build in-depth conceptual understanding (Rokhmat, Hikmawati, et al., 2022).

One relevant learning approach to address these challenges is Problem-Based Learning. This model is designed by placing contextual problems as the starting point of learning activities, so that students are encouraged to conduct investigations, identify important information, analyze data, develop alternative solutions, and communicate their findings (Erika et al., 2024). Through this process, students are actively involved in constructing knowledge based on authentic learning experiences. In physics learning, problem-based learning has great potential to help students understand the relationship between theoretical concepts and real-world applications, particularly in the topic of circular motion, which is closely related to everyday life phenomena. In addition to improving conceptual mastery, this model also contributes to the development of critical thinking skills, scientific communication, collaboration, and decision-making (Rokhmat, Gunada, et al., 2022).

On the other hand, universities have an academic and social responsibility to contribute to improving the quality of education through the Impactful Campus Program. This program emphasizes the importance of active involvement of the academic community in providing real solutions for society, including in the field of education (Hikmawati et al., 2025). One concrete implementation of this program is through the School Field Introduction Program, a field experience program for prospective teacher students to learn about school culture, understand student characteristics, and directly implement learning innovations in partner schools. This program not only provides professional experience for students but also opens up opportunities for the transfer of learning innovations from universities to schools (Rizkika et al., 2023).

The School Field Introduction Program provides a platform for student teachers to implement innovative learning models relevant to student needs and global education policy trends. Through direct involvement in schools, students can integrate problem-based learning approaches with real-world physics learning contexts. Initial observations during the program at Mataram State Senior High School 7 revealed that students demonstrated enthusiasm for physics learning, but their skills in analyzing contextual problems, constructing scientific arguments, and connecting physics concepts with real-world phenomena still needed strengthening, particularly in the circular motion topic (Sutrio et al., 2023). Therefore, the implementation of the problem-based learning model in the circular motion topic through the School Field Introduction Program is considered relevant as an effort to support quality physics learning, while also representing a tangible contribution from higher education institutions in supporting the achievement of Sustainable Development Goals by improving the quality of education in schools (Mustari et al., 2023).

Methods

This research uses a quantitative descriptive approach to describe the implementation of the Problem-Based Learning model on circular motion in the School Field Introduction Program, part of the Impactful Campus Program. The research was conducted in the odd semester of the 2025/2026 academic year at SMA Negeri 7 Mataram. The learning process was carried out by student interns under the supervision of a mentor teacher and field supervisor during the school environment introduction activities (Creswell, 2012).

The research subjects consisted of 33 grade XI Phase F students participating in physics lessons on circular motion. The learning was carried out based on a teaching module designed with reference to the Phase F Learning Outcomes for physics in the Independent Curriculum. In the Physics Understanding element, students are expected to be able to apply the concepts and principles of vectors, kinematics, and dynamics of motion to solve various physics problems. Furthermore, the learning also refers to the Process Understanding element, namely the ability to observe, question and predict, plan investigations, process and analyze data, create solutions, conduct evaluations and reflections, and communicate results.

Learning activities are carried out by applying the syntax of the problem-based learning model which includes (1) orienting students to problems, (2) organizing students to learn, (3) guiding individual and group investigations, (4) developing and presenting work results, and (5) analyzing and evaluating the problem-solving process. At each stage, students are given contextual problems related to the phenomenon of circular motion, then collaboratively identify problems, analyze concepts, discuss, formulate solutions, and present results (Hikmawati et al., 2022); (Sudjimat et al., 2020).

Data on the knowledge aspect was obtained through an essay test consisting of 6 questions arranged based on the Higher Order Thinking Skills (HOTS) indicators referring to Bloom's taxonomy, namely analyzing (C4), evaluating (C5), and creating (C6). At the C4 level (analyzing), students are assessed based on their ability to identify important information in physics problems, distinguish the quantities involved, determine relationships between concepts, and explain the causes of circular motion phenomena. At the C5 level (evaluating), the assessment focuses on students' ability to assess the accuracy of problem-solving procedures, check the appropriateness of the use of physics concepts or equations, provide scientific arguments based on data, and determine appropriate conclusions. Meanwhile, at the C6 level (creating), students are assessed based on their ability to design problem-solving strategies, develop alternative solutions, connect physics concepts with new situations, and formulate final solutions logically and systematically (Liana et al., 2023). The assessment for each question item uses a scale of 1–4, namely a score of 4 if four indicators are met, a score of 3 if three indicators are met, a score of 2 if two indicators are met, and a score of 1 if one indicator is met. This instrument is used to measure students' conceptual mastery of circular motion and to identify the development of higher-order thinking skills during the learning process. Table 1 shows the learning outcome assessment indicators for the cognitive aspect.

Table 1. Indicators for assessing learning outcomes in the cognitive aspect

No	Cognitive Level	Assessment Indicators
1	C4 (Analyzing)	(1) Identifying important information in circular motion physics problems. (2) Distinguishing the physical quantities involved in the problem. (3) Determining the relationships among relevant physics concepts or principles. (4) Explaining the causes or patterns of phenomena based on physics concepts.
2	C5 (Evaluating)	(1) Evaluating the accuracy of problem-solving procedures. (2) Examining the appropriateness of formulas or physics concepts used. (3) Providing scientific arguments based on available data or facts. (4) Determining the most appropriate decision or conclusion based on the analysis results.
3	C6 (Creating)	(1) Designing a systematic strategy for solving physics problems. (2) Developing alternative solutions to the given problems. (3) Relating physics concepts to new situations or contexts. (4) Constructing final conclusions or solutions logically, creatively, and scientifically.

Data on the attitude aspect was obtained through an attitude observation sheet using a scale of 1–4. Assessment was based on the number of indicators fulfilled, namely a score of 4 if four indicators were fulfilled, a score of 3 if three indicators were fulfilled, a score of 2 if two indicators were fulfilled, and a score of 1 if one indicator was fulfilled. The attitude indicators observed included five character dimensions, namely noble morals, mutual cooperation, independence, critical reasoning, and creativity. Table 2 shows the indicators for assessing learning outcomes in the attitude aspect.

Table 2. Indicators for assessing learning outcomes in the attitude aspect

No	Attitude Profile	Assessment Indicators
1	Noble Character	(1) Demonstrating concern for maintaining the learning environment. (2) Maintaining integrity and honesty during the learning process. (3) Demonstrating positive attitudes in self-care and maintaining personal neatness. (4) Respecting the opinions, contributions, and presence of others.
2	Collaboration	(1) Actively cooperating in group activities. (2) Communicating positively with peers and teachers. (3) Responding appropriately to group situations or needs. (4) Willingly sharing ideas, experiences, or positive contributions with group members.
3	Independence	(1) Showing initiative in completing assigned tasks. (2) Demonstrating self-confidence during discussions or presentations. (3) Showing discipline in participating in learning activities. (4) Taking responsibility for individual and group tasks.
4	Critical Thinking	(1) Actively asking questions during the learning process. (2) Identifying phenomena through observation using the senses. (3) Processing information and ideas based on discussion or observation results. (4) Reflecting on the thinking process and learning outcomes achieved.
5	Creativity	(1) Enriching existing ideas during discussions. (2) Demonstrating flexibility in thinking about alternative solutions. (3) Generating new ideas or approaches in solving problems. (4) Providing relevant solutions to the given problems.

Meanwhile, data on the skills aspect was obtained through a skills observation sheet (psychomotor) which also used a scale of 1–4, with the same assessment criteria, namely a score of 4 if four indicators are met, a score of 3 if three indicators are met, a score of 2 if two indicators are met, and a score of 1 if one indicator is met. The skills assessment focused on five indicators of science process skills, namely observing, asking questions, predicting, conducting experiments, and communicating results. Table 3 shows the indicators for assessing learning outcomes in the skills aspect.

Table 3. Indicators for assessing learning outcomes in the skills aspect

No	Skills Profile	Assessment Indicators
1	Observing	(1) Using one or more senses to collect information about objects or events. (2) Demonstrating observation results regarding similarities and differences among objects. (3) Matching observed objects with the given descriptions or explanations. (4) Identifying object characteristics, such as shape, size, or other physical properties.

2	Questioning	(1) Asking relevant questions related to the observed material or phenomena. (2) Requesting explanations about concepts or information that are not yet understood. (3) Relating questions to the background of the given problem. (4) Presenting questions in a logical, clear, and scientific manner.
3	Predicting	(1) Using facts or data to predict the next process or event. (2) Using patterns or relationships among variables to predict outcomes. (3) Predicting phenomena based on prior experience, observations, or available data. (4) Formulating logical predictions based on relevant physics concepts.
4	Experimenting	(1) Identifying variables or quantities measured in an investigation. (2) Selecting an appropriate experimental design or procedure to test a hypothesis. (3) Recognizing limitations of methods, measuring instruments, or potential experimental errors. (4) Applying safe and systematic working procedures during the investigation.
5	Communicating	(1) Determining the most effective way to present information or investigation results. (2) Transforming data into other representations such as graphs, tables, or diagrams. (3) Reading and interpreting information presented in graphs, tables, or other visual data formats. (4) Presenting observation or investigation results systematically, clearly, and scientifically.

Student learning outcomes for each aspect were calculated using a percentage formula, which involved dividing the obtained score by the maximum score, then multiplying the result by 100%. The assessment results were then converted into achievement categories: a score range of 81–100 was graded A (Excellent), a score range of 71–80 was graded B (Good), a score range of 60–70 was graded C (Fair), and a score below 60 was graded D (Poor).

The data obtained were then analyzed using descriptive statistics, including calculating the average score, frequency distribution, percentage achievement in each category, and interpreting student learning outcomes in the aspects of knowledge, attitudes, and skills. This analysis was conducted to illustrate the effectiveness of the implementation of the problem-based learning model in physics learning within the School Field Introduction Program.

Results and Discussions

Results

This research results section presents data on student learning outcomes after participating in physics learning through the implementation of the Problem Based Learning model on circular motion material in the School Field Introduction Program activities. Student learning outcomes were analyzed comprehensively through three assessment aspects, namely the knowledge aspect (cognitive), the attitude aspect (affective), and the skills aspect (psychomotor). These three aspects were used to provide a comprehensive picture of the development of student competencies, both from concept mastery, character formation, and science process skills during the learning process. The research data were then analyzed using descriptive statistics in the form of average scores, percentages, and achievement categories in each assessment aspect. Figure 1 shows the cognitive aspect value data.

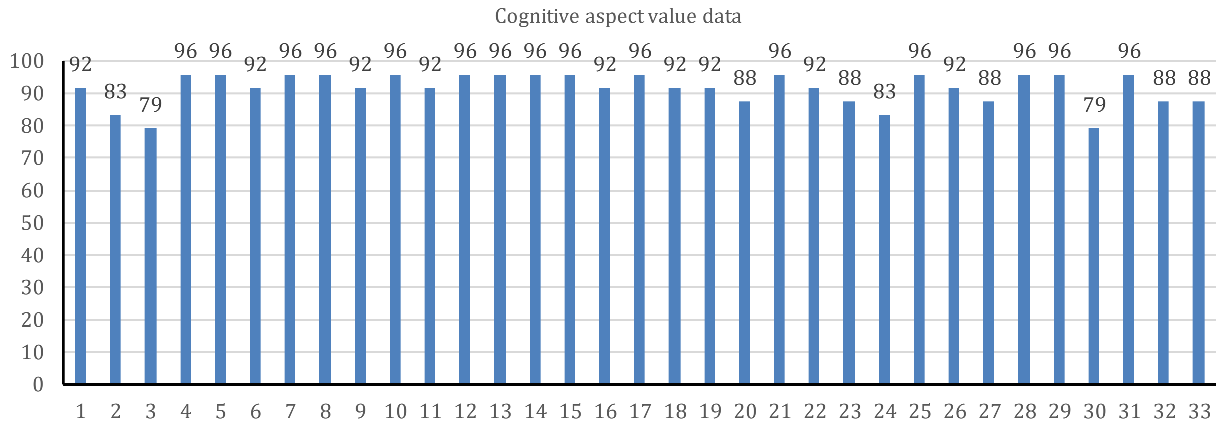

Figure 1. Cognitive aspect value data

The results of the analysis of the cognitive aspects (HOTS) showed that 31 students (93.94%) obtained an A (Very Good) grade with a score range of 83–96, while 2 students (6.06%) obtained a B (Good) grade with a score of 79. There were no students who obtained a C (Sufficient) or D (Poor) grade. Classically, the average student learning outcomes in the knowledge aspect reached 92, so that it was in the range of 81–100 with the Very Good category. This high achievement indicates that most students have been able to master the concepts in the circular motion material well, especially in the ability to analyze the relationship between physical quantities, evaluate the problem-solving process, and design solutions based on the principles of physics. These results indicate that the application of the problem-based learning model is able to facilitate the development of students' higher-order thinking skills through learning activities oriented towards contextual problem solving. Figure 2 shows the scores for each cognitive level.

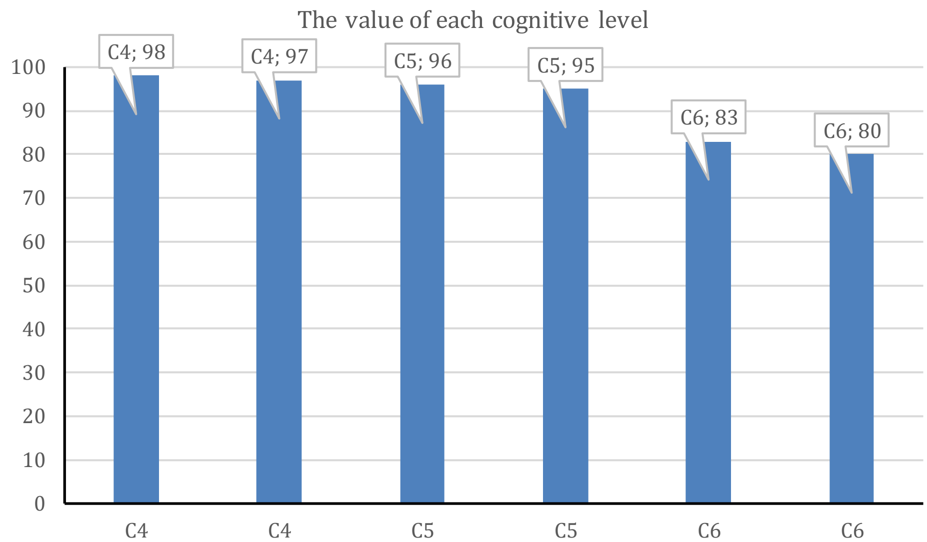

Figure 2. Value of each cognitive level

When reviewed based on the achievements at each cognitive level of Higher Order Thinking Skills (HOTS), the analysis results show that students' abilities at the analyzing level (C4) obtained scores of 98 and 97, which are in the range of 81–100 with the Very Good category. This achievement indicates that students have been able to identify relationships between physical quantities, analyze patterns of motion changes, and interpret concepts in the material on circular motion correctly. At the evaluating level (C5), students obtained scores of 96 and 95 with the Very Good category, which indicates that students are able to evaluate problem-solving procedures, assess the appropriateness of the use of physics concepts, and provide scientific arguments based on available data. Meanwhile, at the creating level (C6), students obtained scores of 83 and 80. A score of 83 is in the Very Good category, while a score of 80 is in the Good category. These results indicate that students have been able to design problem-solving strategies and develop solutions based on the concept of circular motion, although the ability at the creating level is still relatively lower than the ability to analyze and evaluate. Overall, these results show that the implementation of the problem-based learning model is able to optimally develop students' high-level thinking skills, especially at the analysis and evaluation levels.

The results of the analysis of learning outcomes in the attitude aspect showed that 32 students (96.97%) obtained the predicate A (Very Good) with a score range of 85–95, while 1 student (3.03%) obtained the predicate B (Good) with a score of 80. There were no students who obtained the predicate C (Sufficient) or D (Poor). Classically, the average learning outcomes of students in the attitude aspect reached 90, so it was in the range of 81–100 with the Very Good category. These results indicate that most students have shown positive character development during the learning process, especially in the attitude of responsibility, independence, ability to work together, courage to express opinions, and the attitude of respecting the opinions of others. The high achievement in the attitude aspect shows that the implementation of the problem-based learning model not only supports the mastery of physics concepts, but is also effective in strengthening the character of students according to the dimensions of the Pancasila Student Profile. Figure 3 shows the data on learning outcomes in the attitude aspect.

Figure 4 shows data for each indicator from the attitude aspect. When reviewed based on the achievement of each attitude aspect indicator, the observation results show that the indicator of noble character (A1) obtained an average score of 96, which is in the Very Good category. This achievement indicates that students have been able to demonstrate positive behaviors, such as maintaining integrity, respecting others, maintaining the learning environment, and showing politeness during the learning process. In the mutual cooperation indicator (A2), students obtained an average score of 95 with the Very Good category, which indicates the ability to work together, communicate positively, help each other, and actively contribute to group discussions. Furthermore, the independent indicator (A3) obtained an average score of 92 with the Very Good category, which indicates that students have initiative, discipline, self-confidence, and responsibility in completing learning tasks.

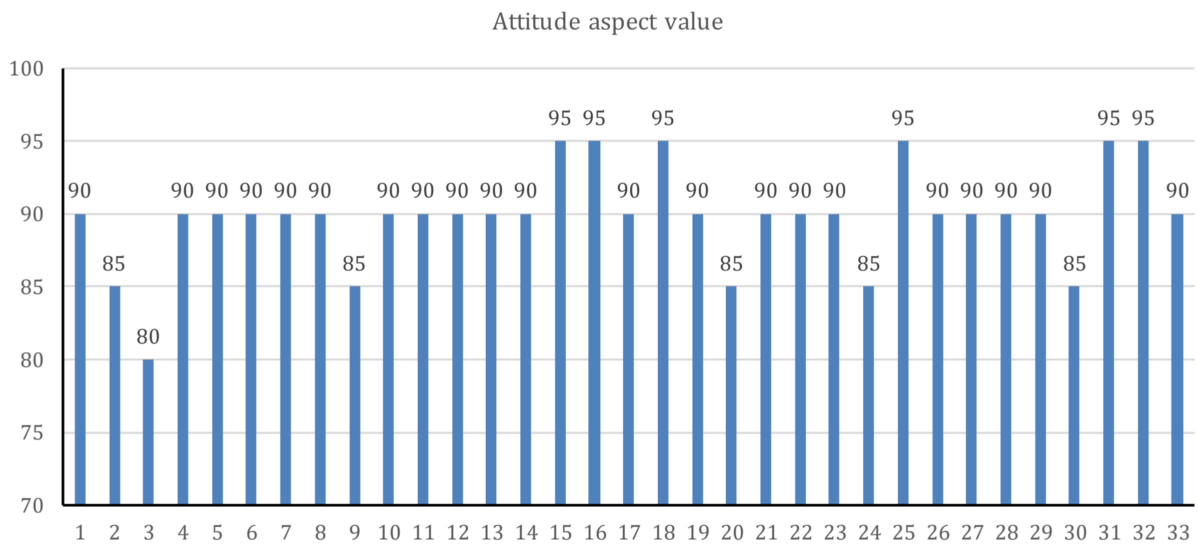

Figure 3. Data on learning outcomes for attitude aspects

In the critical reasoning indicator (A4), students obtained an average score of 91 with a Very Good category, which indicates the ability to ask questions, process information, analyze problems, and reflect on the results of thinking during the learning process. Meanwhile, the creativity indicator (A5) obtained an average score of 75, which is in the Good category. These results indicate that students have been able to develop ideas, provide alternative solutions, and demonstrate flexibility of thinking in solving problems, although creative abilities still need to be developed to be on par with other attitude indicators. In general, these achievements indicate that the implementation of the problem-based learning model is able to support the strengthening of students' character according to the dimensions of the Pancasila Student Profile.

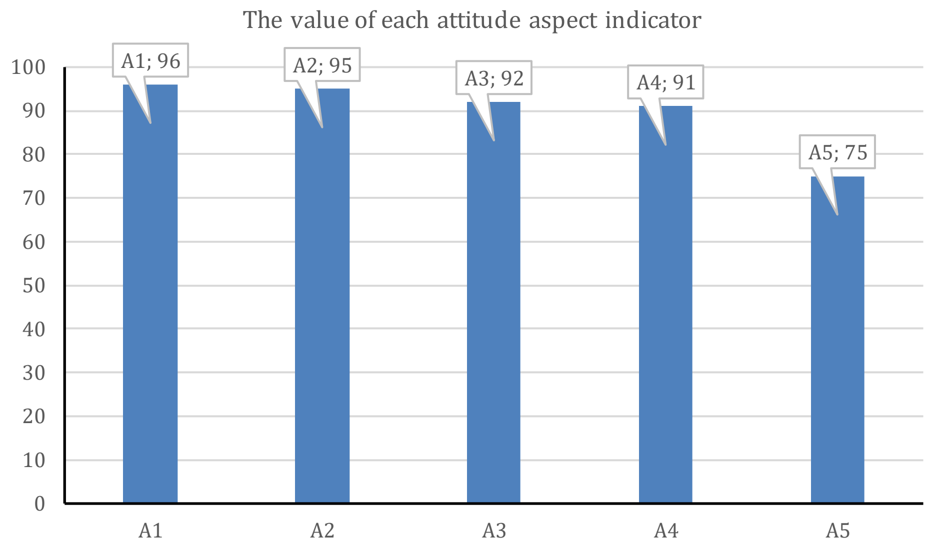

Figure 4. Data for each indicator from the attitude aspect

Figure 5 shows the learning outcomes data for the psychomotoraspect. The analysis results show that 25 students (75.76%) obtained an A (Very Good) grade with a score range of 85–95, while 8 students (24.24%) obtained a B (Good) grade with a score of 80. No students were found to have obtained a C (Sufficient) or D (Poor) grade. Classically, the average student learning outcomes in the skills aspect reached 86, so they were in the range of 81–100 with the Very Good category. These results indicate that most students have been able to demonstrate good science process skills during learning, especially in observing physical phenomena, asking questions, making predictions, carrying out investigations, and communicating results systematically. These findings indicate that the application of the problem-based learning model is able to encourage active student involvement while developing the scientific skills needed in 21st-century physics learning.

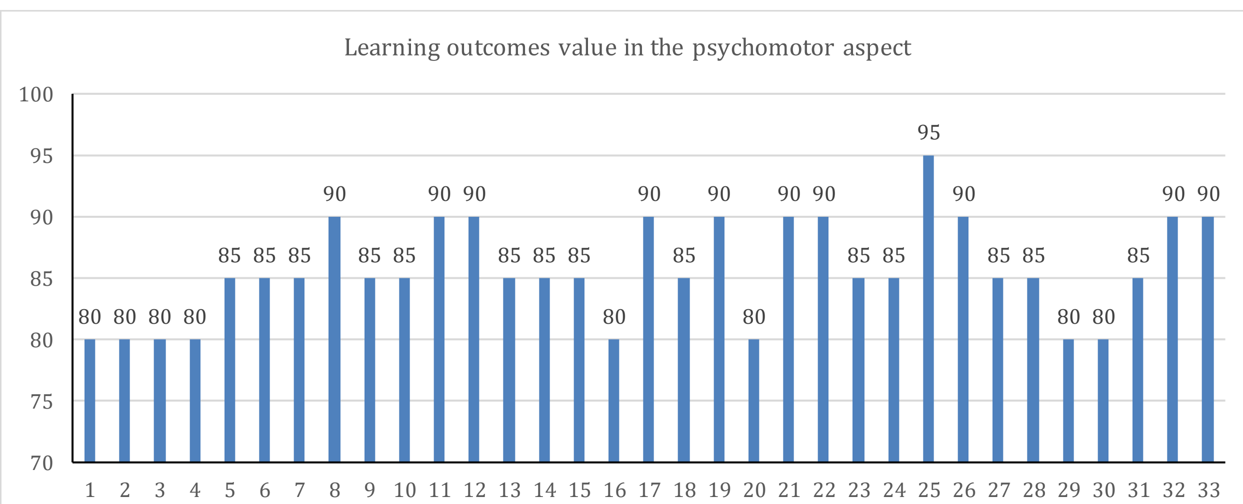

Figure 5. Data on learning outcomes for psychomotor aspects

Figure 6 shows data for each psychomotor aspect indicator. When reviewed based on the achievement of each skill aspect indicator, the observation results show that the observing indicator (P1) obtained an average score of 98, which is in the range of 81–100 with a Very Good category. This achievement indicates that students have been able to make careful observations of physical phenomena, identify object characteristics, and collect information through systematic observation activities. In the asking indicator (P2), students obtained an average score of 87 with a Very Good category, which indicates that students have been able to ask relevant questions, ask for explanations, and connect questions to the context of the given problem. Furthermore, the predicting indicator (P3) obtained an average score of 86 with a Very Good category, which indicates students' ability to use data, patterns, and physics concepts to estimate or predict a phenomenon logically.

In the experiment indicator (P4), students obtained an average score of 77, which is in the range of 71–80 with a Good category. This result indicates that students have been able to conduct investigations and use experimental procedures, although they still need reinforcement in determining experimental designs, identifying variables, and understanding the limitations of the tools or methods used. Meanwhile, the communicating indicator (P5) obtained an average score of 80 with a Good category, which indicates that students have been able to present data, read tables or graphs, and convey discussion results in a coherent and systematic manner. In general, the achievements in each indicator show that the implementation of the problem-based learning model is able to develop students' science process skills, especially in the ability to observe, ask questions, and predict in physics learning.

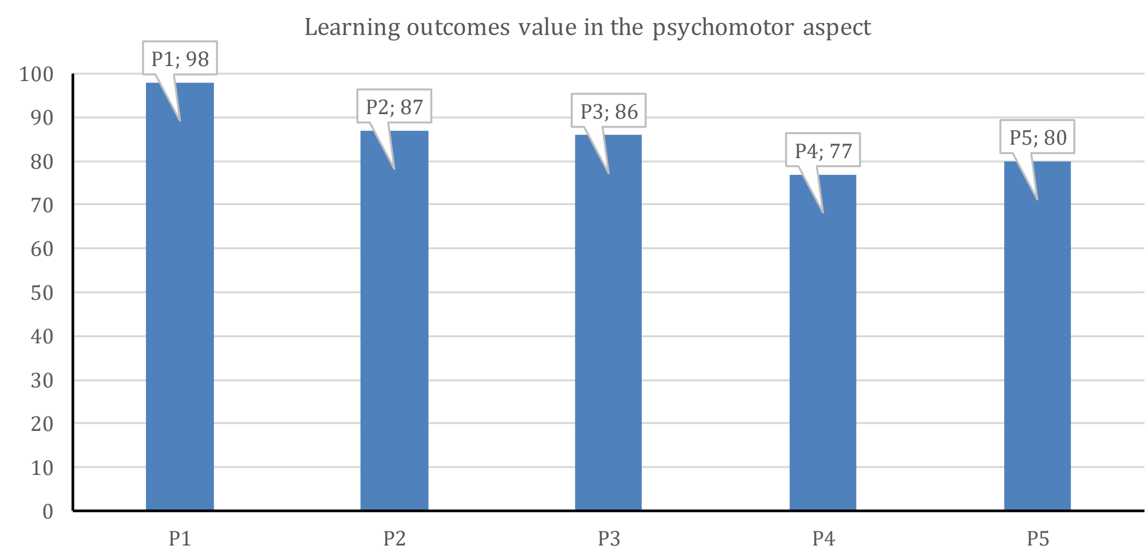

Figure 6. Data for each psychomotor aspect indicator

To obtain a more comprehensive picture of student learning outcomes after participating in physics learning through the implementation of the Problem Based Learning model on circular motion material, an analysis was conducted on three assessment aspects, namely cognitive, affective, and psychomotor. Comparison of the average scores in these three aspects provides information on the overall level of learning success, both in terms of concept mastery, character development, and students' science process skills. The comparison of the average student learning outcomes in each aspect is presented in Table 4.

Table 4. Comparison of average student learning outcomes in each aspect

No	Assessment Aspects	Average Score	Predicate	Category
1	Cognitive	92	A	Very Good
2	Affective	90	A	Very Good
3	Psychomotor	86	A	Very Good

Based on the table, the knowledge aspect shows the highest average, namely 92, followed by the attitude aspect at 90, and the skills aspect at 86. The three aspects are in the range of 81–100 with a predicate of A (Very Good), which shows that the implementation of the problem-based learning model on the material of circular motion provides positive results on students' mastery of concepts, character formation, and science process skills.

Discussions

The research results show that the implementation of the Problem-Based Learning model on circular motion within the School Field Introduction Program positively contributed to improving student learning outcomes overall. These findings demonstrate that school field introduction activities not only serve as a means of developing the professional competencies of prospective teacher students but can also serve as a platform for implementing learning innovations that directly impact the quality of learning in schools (Palupi et al., 2020). This aligns with the objectives of the Impactful Campus Program, which emphasizes the importance of higher education involvement in making a tangible contribution to resolving various educational challenges through academic practices relevant to the needs of the community and educational institutions (Lestari et al., 2023).

From a learning perspective, the application of the problem-based learning model demonstrates that students experience a more active, contextual, and learner-centered learning experience. Theoretically, the problem-based learning model was developed based on a constructivist approach that positions students as the primary subjects in constructing knowledge through authentic learning experiences (Nurjamilah et al., 2021). In physics learning, particularly on circular motion, the presentation of contextual problems allows students to connect abstract concepts with real-world phenomena they encounter in their daily lives. Through the stages of problem identification, discussion, investigation, data analysis, and solution development, students do not only receive information passively, but are actively involved in the process of building conceptual understanding (Hikmawati, Suastra, et al., 2024).

In terms of knowledge, research results indicate that the application of the problem-based learning model can encourage the development of students' higher-order thinking skills. This is evident in students' ability to analyze problems, evaluate various alternative solutions, and develop solutions based on the physics concepts they have learned (Rokhmat et al., 2017). Theoretically, problem-based learning is designed to develop Higher Order

Thinking Skills, as students are faced with situations that require critical, analytical, and reflective thinking. In the context of circular motion, the characteristics of concepts involving the relationships between physical quantities, the interpretation of phenomena, and the application of mathematical concepts are highly suitable for teaching through this model. Thus, the problem-based learning model provides more space for students to develop in-depth conceptual understanding (Verawati et al., 2021).

In terms of attitudes, research results indicate that the learning process also impacts students' character development. During the problem-solving process, students demonstrated engagement in discussions, the ability to work collaboratively, responsibility for tasks, courage to express opinions, and the ability to respect the ideas of others (Devy et al., 2020). These findings indicate that physics learning is not only oriented towards mastering concepts but also serves as a means of strengthening character in accordance with the dimensions of the Pancasila Student Profile, such as noble character, mutual cooperation, independence, critical reasoning, and creativity. Pedagogically, the social interactions that emerge in collaborative learning are a crucial factor in character formation and the development of students' social competence (Rahayu et al., 2021).

In terms of skills, the application of the problem-based learning model also demonstrates a positive contribution to students' science process skills. During the learning process, students are involved in activities such as observing phenomena, asking questions, formulating predictions, conducting investigations, analyzing information, and communicating discussion results (Hikmawati et al., 2020). These activities align with the nature of physics learning as a scientific process that emphasizes not only the production of knowledge but also the process of acquiring knowledge through scientific methods (Rachman et al., 2020). The science process skills developed during learning serve as an important foundation for developing scientific thinking, problem-solving, and data-driven decision-making abilities (Hikmawati et al., 2021).

More broadly, the results of this study indicate that the integration of the School Field Introduction Program activities with the implementation of the problem-based learning model has a strong relevance to the objectives of the Sustainable Development Goals, especially Sustainable Development Goal 4 (Quality Education), which emphasizes the importance of quality, inclusive, and sustainable education (Sappaile et al., 2024). In addition, strengthening critical thinking, collaboration, communication, creativity, and problem-solving skills during learning also supports the achievement of Sustainable Development Goal 8 (Decent Work and Economic Growth) through the development of 21st-century competencies relevant to the needs of the future world of work. Thus, the School Field Introduction Program activities not only provide professional experience for prospective teacher students but also become a concrete form of implementation of the Impact Campus Program in supporting educational transformation in schools (Ahmadi et al., 2025).

Conclusion

Based on the research findings, it can be concluded that the implementation of the Problem-Based Learning model on circular motion in the School Field Introduction Program, as part of the Impactful Campus Program, positively contributes to student learning outcomes. The application of problem-based learning has been proven to support the development of student competencies comprehensively, including mastery of physics concepts, character development, and strengthening of science process skills. Through student-centered, contextual, and problem-solving-based learning, students demonstrated development in higher-order thinking skills, collaboration, scientific communication, independence, and systematic problem-solving. These findings demonstrate that the integration of learning innovations through the School Field Introduction Program can be a concrete implementation of the Impactful Campus Program while supporting improvements in the quality of education in line with the United Nations Sustainable Development Goals, particularly in the education sector.

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