Effort to Improve the Learning Process and Outcomes of Rhythmic Activities through Project Based Learning at SMP N 3 Panggang

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Abstract: This study aimed at improving the process and learning outcomes of the rhythmic activities of Grade VIII students of SMP Negeri 3 Panggang using Project Based Learning. This research is a Classroom Action Research conducted in 2 cycles consisting of 4 stages for each. The research subjects were students of grade VIII of SMP Negeri 3 Panggang with a total number of 36. In each cycle, rhythmic gymnastics materials were provided by employing Project Based Learning. The instrument used to assess the students is a test sheet and observation sheet for students’ performance and attitudes filled by the researcher as the teacher. While the instrument used to assess the teacher is an observation sheet to be filled by the collaborators and questionnaires filled by the students after the learning process has finished. The research findings showed that there was an increase in student learning outcomes in that they have met the specified Standard of Achievement that is 75. In terms of cognitive aspect, from 36 students, only 6 students or about 17% of students did not reach the SoA while 30 others or 83% of students met the SoA. In addition, in terms of psychomotor or skill aspect, of 36 students, 2 students or 6% did not meet the SoA and 34 others or 94 of students reached the grades in accordance with the specified SoA.

1 INTRODUCTION

Physical Education learning process especially in SMP 3 Panggang often experiences many problems, one of which is the difficulty to achieve the expected learning objectives optimally. Based on the results of preliminary observations toward the learning process of Physical Education at the school, it was found that: (1) Teachers used lecture learning method that tend to only transfer information without involving the activeness of students, so that the learning was monotonous; (2) Students were more likely to be passive. As seen from 36 students, few students were seen to be serious in learning, while the others seemed to be joking and bored with ongoing learning; (3) The students were still afraid to perform gymnastic movements that their performance was far from it was expected. (4) The students lacked of communicative attitudes, creativity and cooperation during the learning process.

The Act No. 20 of 2003 concerning the National Education System explains that the notion of education is a conscious and planned effort contained in the objectives of national education and primary school education, namely to create an atmosphere of learning and learning activities with the aim that the students educated actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by society. Therefore, learning process must involve students as much as possible in order to be able to explore various potentials within students, and finally students feel they have the motivation to learn, which will have an impact on the learning outcomes.

The prior observed learning activities had an impact on the students’ low motivation to learn, low level of activeness, as well as low interaction to work together. These caused students to feel bored and passive during the learning process which ultimately led to the stance that learning goals and student learning outcomes cannot be achieved optimally. This can be seen when the teacher
discussed about the tasks given together with the students. There were some students who could not finish their work because the students did not understand the materials presented by the teacher. The stated problems above occurred because the teacher used the lecture method in the learning process and tended to only read aloud the materials from some references for the students and then the students made a move from the assignment given by the teacher individually. Therefore, creativity is urgently needed by the teacher to have the expertise to choose and use appropriate learning strategies so that learning process could be fun. Thus, the students are able to be active and successful learning process can be achieved optimally.

According to Mulyasa (2007), teachers need to pay attention to several things to support students achieving learning goals, namely: (1) reducing the lecture method; (2) modifying and enriching learning materials; (3) using a variety of procedures; (4) creating learning situations that can develop students’ ability to move and work together; (5) involving students in various activities. In this case, Project Based Learning is an innovative learning model or approach, which emphasizes contextual learning through complex activities (Cord, 2001; Thomas, Mergendoller, & Michaelson, 1999; Moss, Van-Duzer, Carol, 1998) in Muh. Rais (2010).

Project Based Learning as a model of cooperative and accommodative learning of students’ abilities towards free and creative thinking processes using projects (activities) as the core of learning (Muh.Rais: 2010). In this activity, students explore, assess, interpret, and synthesize information to obtain various learning outcomes (knowledge, skills, and attitudes).

The implementation of Project Based Learning (PBL) model includes steps (syntax) which becomes its trademark and sets it apart from other learning models such Discovery Learning model and Problem Based Learning model. The learning steps are: (1) determining the project; (2) making a project plan; (3) scheduling; (4) completing the project with teachers’ assistance and monitor; (5) assessing results / preparing reports / presenting; (6) evaluating project processes and results. This study aimed at describing the application of PBL, find out students' responses about learning using PBL and whether the application of PBL learning models can improve the process and learning outcomes of students in Physical Education subject especially in rhythmic activity materials.

This research was expected to provide alternative ways of teaching teachers to improve teachers’ performance, enrich variation in providing subject matters, and improve their ability to use various learning models, especially PBL as an effort to improve teacher professionalism.

It was also further expected that the application of PBL model could be used by the researcher as a means to practice the acquired theories and self-development programs at the real condition of school. This also trained creativity in designing interesting learning and practicing the ability to overcome problems that arise in classrooms.

Through PBL, Physical Education learning process can provide a varied learning experience so as to improve students’ learning outcomes, increase students’ motivation to learn, increase students’ involvement in learning process, foster a sense of responsibility and cooperation between students. In addition, it can provide a policy foundation that will be taken in improving the quality of students’ learning outcomes and provide input to the school in terms of improving the learning process.

2 METHOD

This research was conducted at SMP N 3 Panggang on the first semester. The subjects of this research were students of grade VIII with a total number of 36 consisting of 29 male students and 7 female students. This research is in the form of Classroom Action Research which can be interpreted as an observation of learning activities in the form of an action, which is deliberately raised and occurs in a class simultaneously.

The approach used in this study was a qualitative descriptive approach that is research that describes how a learning model is applied and how the expected results can be achieved. The qualitative research method is called the naturalistic research method because the research is conducted in natural conditions where the researcher is a key instrument and the data collection technique is carried out by triangulation (Sugiono: 2010). This study used a form of collaborative action research, where the researcher acted as the teacher while the Natural Science and the Indonesian teachers acted as collaborators.

This study used a Classroom Action Research model developed by Suhrsmini Arikunto (2010) which lasted for two cycles. Each cycle consisted of planning, implementing, observing, and reflecting stages. The planning stage of the activity carried out
by the researcher was compiling a plan to determine the steps which were taken in action. The implementation phase of the research action explained the steps of activities that must be carried out by teacher and students to improve learning outcomes. The action implementation activity began with cycle 1, then continued with the action cycle phase 2. Observation was the process of collecting data in that the researcher made observations and recorded everything happening during the implementation of treatment to obtain accurate data for improvement of the next cycle. In the reflection stage, the researcher evaluated what had been done.

The data in this research were collected by observation, documentation techniques, and assessment techniques. The tools used in the observation technique are observation sheets. The documentation in this study is in the forms of photographs and videos. Meanwhile, the assessment techniques included oral tests and skill or performance assessments. Then, the data were analyzed after each cycle of action. Data analysis techniques used in this study were descriptive qualitative techniques, namely data reduction, data presentation, and drawing conclusions. Data reduction is the process of selecting data that have already been collected, focusing and simplifying data to compile data. Data presentation is done by compiling in the form of tables and narratives. Then, the data were compared and combined with varied information or data obtained from the data reduction results to provide the possibility of drawing conclusions and taking action. Conclusion is the core of data collection. Conclusions can be drawn from the results of students’ assessment both individually and classically during learning process.

3 RESULTS AND DISCUSSION

3.1 Results

The initial situation before the application of PBL could be described that the teacher in teaching and learning process was monotonous so it could not attract the attention of students to join the learning process. Learning activities there were more teacher-centered and did not involve students directly. It can be seen that from 36 students, there were only 8 (22%) students who met the school Standard of Achievement and 28 (78%) others still scored below the SoA in cycle 1.

Cycle I Results

The assessment on the teacher activity by applying PBL model was conducted using teacher observation sheets. The results of observations in the first cycle showed that the researcher got an average percentage value of 100%, which is included in the criteria of very good (A). On the learning process, the teacher opened learning well. The teacher only needed to improve activities to monitor the students’ discipline and skills in conditioning the classroom. Motivation given by the teacher to students when using PBL model could increase the enthusiasm of students in learning. Group discussion activities have increased, as seen in the discussion there were no students who were still busy playing alone. Students looked more enthusiastic, so the learning process ran smoothly.

Based on the results of observations and data analysis in the first cycle of meeting 1 and meeting 2, the reflection in the first cycle was as follows: (1) the learning steps taken by the teacher by using the PBL model were already good, namely obtaining a score of 100%. At meeting 2, however, the teacher still needed to improve the results obtained for aspects that have not been seen yet; (2) the results of the cognitive test in cycle 1 showed that only 8 students (22%) obtained the scores meeting the SoA, while 28 others (78%) could not meet the SoA. Then, for the psychomotor aspect in cycle 1, the number of students who met the SoA was 17 or 47% and 19 others or 53% students failed; (3) the activities of students during the learning process using the PBL model have shown improvement on several aspects from meeting 1 to meeting 2. However, some students were not confident enough to express their opinions on the answers of other groups. They were still hesitant and lacked of courage to express impressions or opinions about learning. The results of reflection from the first cycle were then used to carry out the improvement of learning in the second cycle.

Cycle II Results

Based on the results of observations and data analysis in the second cycle of meeting 1 and meeting 2, the reflection in the first cycle was as follows: (1) the teacher’s performance regarding the learning steps using PBL model was scored 100%, so that the results obtained was categorized very good too; (2) the learning outcomes of students in the second cycle of meeting 2 showed the final grade average of the class. The results of the cognitive test was that 30 or 83% students succeeded to meet the SoA, while the 6 or 17% others failed. Furthermore for the psychomotor aspect in cycle 2, the number of
students who met the SoA was 34 or 94% and 2 others or 6% students failed; (3) the activities of students in the PBL learning process have shown improvement. In this cycle, all aspects of the students’ performance are already visible. There were no students busy with themselves. In other way around, the students have gained courage to ask questions to the teacher or express their impressions or opinions.

Improved student learning outcomes provide a picture of the attention and understanding of students towards learning process. The impact of the attention and understanding of the students on learning is also shown by an increase in mastery learning in general. This increase can be seen in the following table.

<table>
<thead>
<tr>
<th>No</th>
<th>Cycle</th>
<th>Knowledge/ Cognitive</th>
<th>Increase(%)</th>
<th>The skills/ Psychomotor</th>
<th>Increase(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Complete</td>
<td>Not yet</td>
<td>Complete</td>
<td>Not yet</td>
</tr>
<tr>
<td>1</td>
<td>Cycle 1</td>
<td>8</td>
<td>28</td>
<td>61.3%</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>Cycle 2</td>
<td>30</td>
<td>6</td>
<td>34</td>
<td>2</td>
</tr>
</tbody>
</table>

The table shows a comparison of the average value of student learning outcomes starting from cycle I and cycle II. Based on the calculation of the data that has been done, it can be seen that the value of student learning outcomes in participating in learning rhythmic activities has increased in each cycle. In cycle 2, 30 or 83% students succeeded to meet the SoA, while the 6 or 17% others failed for the knowledge or cognitive test. It has improved much compared to the previous result in cycle 1 that only 8 or 22% students succeeded to meet SoA, while 28 or 78% others failed. Then for the skill or psychomotor test in cycle 2, there were 34 (94%) students who succeeded to meet SoA, and only 2 or (6%) of them failed. It has improved much compared to the previous result in cycle 1 that only 17 students or 47% succeeded and 19 or 53% failed to achieve it.

3.2 Discussion

Based on the conducted observations, the PBL model was implemented in accordance with the steps in the learning implementation plan. The findings in the first cycle of the action showed that the teacher has done the learning process quite well, one of which was that the teacher explained the learning activities to be carried out. The teacher also provided motivation for students to always be enthusiastic in learning. This was done to prepare and guide students to be actively involved in learning. The students were expected to have motivation to learn, so that the learning objectives could be achieved well.

The learning process was carried out in cycle I and cycle II in accordance with the lesson plans which have been prepared. Broadly speaking, learning process in the first cycle and second cycle can be summarized as follows: (1) the teacher gave an explanation of the material on rhythmic activity; (2) the students formed groups and are given the task of completing their respective tasks; (3) the students discussed to complete the given tasks; (4) each student took turns explaining the movements and ways of completing the tasks that have been discussed within the groups; and (5) the students completed the test or evaluation at the end of the activity individually.

In the planning stage of cycle I the researcher: (1) chose material for students to learn; (2) designed a lesson plan with the PBL model; (3) prepared learning media and examples of rhythmic movement activities through videos and images; (4) prepared data collection tools or instruments to be used for data collection in the form of teacher observation sheets during the learning process using PBL model, student worksheets (LKS), items and answers to individual tests, student observation sheets during the learning process, field note sheets, and cameras for documentation purposes in the form of photos and videos during learning activities.

The first meeting of cycle I was held on November 12, 2018, and the second meeting on November 15, 2018. Each meeting was conducted for 3 x 40 minutes. The activity began with greeting, checking attendance, giving apperception, conveying information about materials to be carried out, and telling the purpose of the activity to be
carried out. After that, the teacher gave examples of how to do rhythmic motion activities by showing videos and pictures that are adjusted to the material taught, then the teacher gave the students opportunity to ask about examples of how to do rhythmic motion activities given. However, none of them asked.

After that, the teacher together with the students determined the theme/topic of the project by compiling a series of rhythmic motor activity (basic steps, movement and swing arm and hand, the straightening of the joints, and the rhythm of motion) as forming the heating motion in the rhythmic activities. The theme chosen was be healthy and happy, in order that the rhythmic movement activities carried out would make the students healthy and happy.

The next stage was that the teacher created groups based on the chosen theme. The 36 students were divided into 5 groups with the members of each group totaling 6 or 8 students. Then, each group determined the title of the project associated with the chosen theme. The teacher facilitated the students to demonstrate a variety of initial attitudes, footsteps, arm swings, alignment of body joints, and rhythmic movements in rhythmic gymnastics. The students tried the rhythmic basic movements (initial attitude, footsteps, arm swings) to get explanations and problem solving, as well as receive feedback from the teacher.

At the time of the core activity took place, the teacher also provided reinforcement to students as well as assessed the activities of students using the observation sheets and affective assessment. At the next stage, the teacher gave individual tests to students. The teacher gave instructions on the assessment of knowledge and the teacher asked the students to practice a series of movements that were successfully made by each group.

In the closing part of teaching, what the teacher did were reflecting on the learning process and summing up the materials. The teacher asked the students if they still found the materials confusing. Next, the teacher asked how the students felt after joining the learning activities using the PBL model. Furthermore, the teacher invited the students to carry out prayers and took a leave by greeting.

The conducted observation resulted in that the teacher carried out the steps of learning very well. The students’ activeness and involvement have improved compared to theirs in the previous cycle. This reflected that the students have shown more positive attitudes in the second cycle. There is a significant improvement made by the teacher and students because the implementation of the learning in this cycle was based on the reflection toward the process in the previous cycle. Among others, by providing more motivation, explaining more details to students about the correct rhythmic activity movements and giving guidance evenly and thoroughly to students.

The assessments of students in first and second cycles consist of knowledge and skills aspects. The skill assessment result was obtained by the optimum score when practicing the basic running technique, while the knowledge one was based on the scores of the knowledge test results.
Based on the findings of the first and second cycles, it can be seen that the use of PBL model on Physical Education subject for rhythmic motion activity materials was carried out by teacher well, and the research could run smoothly. In addition, the students also increasingly understand the application of PBL model. This can be seen from the enthusiasm of students when participating in the learning process.

The findings also indicated an improvement on the students’ learning outcomes. The percentages of the students who completely succeeded to meet the Standard of Achievement for the knowledge and skill aspects were 22% and 47%, and they improved in the second cycle by 83% and 94%. This showed a significant improvement of the learning outcomes. Almost all of the students could meet the specified SoA in the second cycle. This improvement is an indicator that the application of PBL model could be used to improve learning outcomes of Physical Education subject on the rhythmic motion activity material of the eighth grade students at SMP Negeri 3 Panggang.

4 CONCLUSIONS AND SUGGESTIONS

Conclusion
Based on the data exposure and research findings as well as the discussion, several conclusions can be drawn. The application of PBL on Physical Education subject for rhythmic activity materials of grade VIII students at SMP Negeri 3 Panggang has been carried out by the teacher well, and the research was also conducted smoothly. This happened because the teacher reflected at the end of the first cycle, then the shortcomings were made in the second cycle. The application of PBL could improve the students’ learning outcomes. The teacher was able to increase the learning attitudes of the students, encourage students to try to apply their knowledge by working in groups, discussing, working together in solving problems together.

Suggestion
Based on the conclusions above it is recommended for teachers to improve learning outcomes of students by using a variety of methods and applying learning models in accordance with ongoing learning activities. This can make students more active and eager to participate in the learning process. Teachers can give rewards to students to be more active and not ashamed to answer questions. In addition, teachers can provide guidance equally both in groups and to all students.

REFERENCES