

Students' Participation in Physical Education Learning through Modification of Equipment

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Abstract—Physical education learning through the application of modification of equipment further underlines the level of creativity of teachers as well as the activeness of students. The modification approach is another way of teaching physical education. The purpose of this study was to increase the participation of students in physical education. This study was conducted through the use of classroom action research. Data collection technique employed was observation. Data was analyzed through the use of descriptive description because most of the data were collected in the form of development of learning process of students' participation. The results showed that through the application of equipment modification on physical education learning there is increase in students' participation. The conclusion of this study proves that the modification of equipment can increase students' participation in physical education learning, and that it can be used as an alternative method of teaching.

Keywords—participation, physical education, and modification of equipment

I. INTRODUCTION

Physical education in schools is a tool that is prepared for the purpose of developing the skills, knowledge, and cognitive aspects of the students in order to support their respective physical activities [1,2]. The purpose of the application of physical education is to bring about the development of personality, self-confidence, and knowledge of students to remain active in performing activities every day and for them to be able to maintain their activities throughout their life. [1,3,4]. The role of students' participation in physical education is highly beneficial in increasing the level of the students' motor skills, personality, and cognitive [5]. This advantage provides awareness for the importance of engaging in a healthy lifestyle which makes provision for changes in self and students' behavior [6]. Furthermore, in supporting the students' skills, teachers' creativity and innovations in the modification of equipment are required [7].

Modification in the field of sports is usually done to match up with the needs and abilities of students, especially on rules and equipment so that it will easily facilitate the students in performing physical activities [8]. Modification can be applied in physical education subjects. Research in the field of modification indicates an increase in students' participation in sports, experience and skills [8,9]. For example, in a modified football game, the application of hotteling with has been previously rejected in traditional sport games are now being considered to be applied [8]. It will be easier to apply

modifications of equipment to students because the equipment required for the modification are easier to find.

The goal of this research work is to increase students' participation during the learning process of physical education, which in its implementation will be applied through equipment modification. Equipment modification was chosen because the tool used is much easier to when used to assist students in carrying out practical activities on learning physical education compared to the use of the actual equipment. Therefore, the application of the modified equipment is expected to foster a sense of students' confidence in doing physical activities as well as trigger their interests in every learning aspects of physical education. Moreover, we know that, sometimes, existing facilities and infrastructure are less supportive and inadequate for the existing learning process, therefore, modification of the equipment is the most appropriate way to tackle the problem. The use of modified equipment tends to be easier to obtain and the cost of implementation is also more affordable.

II. METHODS

The study is a classroom action research, which consisted of planning, action, observation and reflection. A total of 40 students including 18 boys and 22 girls were willing to participate after getting approval from the school. This research collected data on the students' participation through the application of equipment modification.

Equipment modification learning strategy was developed to obtain students' participation. Students were made into rows for the purpose of monitoring the conditions of the class. Next, the learning was started by praying and then delivery of the materials to be learnt. After that the students did the warming up so that the condition of their body would be ready to receive the material. The physical education material with modification of pre-prepared equipment was conveyed and an example of how to do the movement with the modified equipment was done for the students. After that students were given the opportunity to practice the movement by using the modified equipment. While the students practice the learning that has been given to them, observation was made on the students' learning participation. After which there was reflection on the entire learning process that had been done through the modification. This process was performed by the teacher.

To obtain students' participation outcomes through equipment modification, the researcher used data triangulation, assisted by two collaborators to improve the

validity. Teachers and collaborators recorded each data obtained, then five categories were taken. The five categories used were attendance, readiness, enthusiasm, activeness, and students' involvement in the learning process. Each category was outlined in descriptive sentences which illustrates the increase in students' learning participation.

III. RESULT AND DISCUSSION

Students' learning outcomes was found to increase based on the indicators below. This classroom action research was conducted in three cycles, the results of the study are presented in the table as follows.

TABLE I. STUDENTS' PARTICIPATION DURING THE PHYSICAL EDUCATION LEARNING PROCESS

| No | Indicators | Score | | | |
|----|-------------|----------|---------|----------|-----------|
| | | Precycle | Cycle I | Cycle II | Cycle III |
| 1 | Attendance | 65% | 75% | 87,5% | 100% |
| 2 | Readiness | 62,5% | 72,5% | 80% | 92,5% |
| 3 | Enthusiasm | 65% | 77,5% | 92,5% | 95% |
| 4 | Activeness | 65% | 75% | 85% | 92,5% |
| 5 | Involvement | 62,5% | 77,5% | 82,5% | 92,5% |
| | Mean | 64% | 75,5% | 85,5% | 94,5% |

Students' participation increased in the implementation of cycle I in physical education learning process. This change is attributed to the actions performed by the teacher though the application of the modified equipment which the students began to like. The students became interested with the modification, because it was something new for them different from the previous learning process which was often applied by their teachers. That interest affected the level of attendance, readiness, enthusiasm, and attention of students in the learning process when compared to the period before the modification was made. The activeness and involvement of students increased in the learning process although there were still some students who appeared less active and less involved in the learning process. In order to increase their participation, this existing deficiency was improved and continued in the second cycle.

Cycle II shows increase in students' participation through equipment modification when compared with the cycle I. Improvement could be seen through the presence of students who were late in previous meeting. The application of equipment modification could increasingly trigger students' interest so that students attended early unlike when they used to come late. Although there are still few students who still came late. Readiness, enthusiasm, and attention of students in following the learning process were also increased compared with the previous cycle. This cycle showed that students' activeness, involvement and participation in the learning process has increased, because students increasingly liked the actions performed by the teachers through the application of the modified equipments either individually or in large groups when playing. There were still some students who sometimes seem less active and involved in the learning process delivered by the teacher. The increased students' participation that happened from cycle I to cycle II was because the students had started to adapt to the application of equipment modification.

Cycle III in this research was a habituation of teaching methods applied by the teacher as well as proving the

effectiveness of application of equipment modification in increasing the participation of students in physical education learning. Participation of students in physical education learning in cycle III was found to have also increased compared with students' participation in previous cycles. The increased students' participation in cycle III could be seen from the attendance and readiness of students to receive the materials presented by the teacher. Increased students' participation was also strongly influenced by high-curiosity, enthusiasm, and students' attention to the application of equipment modification by the teacher. In addition, the application made by the teacher through equipment modification brought about substantial enhancement of the activity and involvement of students in every lesson that teachers conveyed especially in physical education.

The mean result of the students' participation in physical education was increasing from precycle of 64% to 75,5% in cycle I, 85,5% in cycle II, and in cycle III it increased to 94,5%. From these results it can be seen that the application of equipment modification is helpful in triggering the participation of students in the learning process of physical education.

IV. CONCLUSION

Teachers are facilitators with the ability of providing the students with learning experiences through equipment modifications. Students who get the application of equipment modification participated more in all physical education activities. With the difference in the motor ability of each student, the application of this equipment modification is very beneficial in helping the students perform activities of physical education.

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