

## **IMPLEMENTATION OF EDMODO-BASED BLENDED LEARNING IMPROVING SHORT DISTANCE RUNNING LEARNING OUTCOMES FOR BUNDA KANDUNGS VOCATIONAL SCHOOL STUDENTS**

**Arifka Fadil Muhammad<sup>1</sup> Elly Diana Mamesah<sup>2</sup>**

University of Negeri Jakarta<sup>1</sup> Islamic University 45 of Bekasi, Indonesia<sup>2</sup>

[fadilarifka29@gmail.com](mailto:fadilarifka29@gmail.com)<sup>1</sup> [ellymamesah82@gmail.com](mailto:ellymamesah82@gmail.com)<sup>2</sup>

### **Abstract**

Education is one of the areas that technology seeks to achieve through online learning. Online learning is indeed less effective because most of it causes problems both from the point of view of students. The blended learning method of learning is a form of learning system that combines online and offline systems that are applied in learning physical education, health and sports. The purpose of this research is to prove the phenomenon of technological advancement in the rapidly growing world of education and data that supports the progress of student learning, that blended learning can be used for modern learning solutions, so that students can study material before practice in the field to increase teaching achievement. The results of this study indicate that blended learning based on edmodo can improve learning outcomes for short distance running can be seen from, the increase in learning outcomes in the pre-test shows students who complete 9 students, the increase occurs in cycle 1 to 20 students and continued at the stage of cycle 2 has increased results 25 students completed.

**Keywords:** Blended learning, Edmodo, physical education, health and sports, short distance running

### **INTRODUCTION**

Education is a process of human development that lasts a lifetime, one of which is that learning education has a very important role, namely through physical activity children will get opportunities in various learning experiences through physical activities that are carried out systematically, provision of learning experiences directed at physical growth. and better psychic. In fact, physical education is a very broad field of study. His point of interest is the enhancement of human motion. Physical education is concerned with the relationship between human movement and other areas of education: the relationship of body-physical development with mind and spirit. The focus on the influence of physical development on the area of growth and development of other aspects of humans is what makes it unique, so an educational method is needed which is commonly called physical education learning (Huston, 2016).

Physical education learning as a process is a means to develop intellectually, skills, psychomotor and affective as a whole by prioritizing the process of developing student motor skills, therefore physical education teachers are required to provide a process of experience of movement that is able to develop students' motor skills optimally. The motor and affective aspects are the main targets of physical education learning so that in the 2013 curriculum, physical education and health subjects fall into category B. Cognitive aspects are something that is important in learning physical education. Cognitive aspects of physical education learning are needed so that students can develop and understand the meaning of physical activity.

The integration of all cognitive, affective and psychomotor aspects will make the learning process progress better. Physical education and health learning have priority in developing aspects of learning, namely the development of psychomotor abilities, then affective and cognitive. Teachers have a role in helping students integrate all aspects of learning. Physical education teachers must be able to optimize all aspects of students themselves so that learning objectives are achieved and make the learning process interesting, the use of methods, facilities, and the use of various learning resources will help students achieve maximum learning goals (Mubarak, 2012).

The 21st century is an era of industrial revolution 4.0, where the 4.0 industrial revolution is a transformation effort towards improvement by integrating the online world and running product lines with the internet as the main support. With the very rapid advancement of technology, all work systems using digital have even entered the realm of education. When the era of the industrial revolution 4.0 entered the world of education, there must be a change that begins with a change in the literacy system (Pablo, 2016). Old literacy in the form of reading, writing and counting must change into new literacy, namely data literacy, technology literacy and human literacy. So that the change from old literacy to new literacy will create a competitive graduate.

Technological advances that touch the aspects of education certainly have obstacles including economic factors, the existence of student participation factors that are still low, which is predicted because of their curiosity about the digital world in the world of education. In junior high school, biological mothers with the majority of male students still use the old literacy system and have not used the new literacy system. All students are still lacking in keeping up with this digital era, as if they feel there is no importance to the digital era in the world of education. When the full online Physical Education Learning system is certainly not effective because most of it causes problems both from the side of students, educators and educational institutions, but these problems can be solved by the blended learning method, a form of learning system that combines in such a way between synchronous learning strategies and asynchronous in order to create a learning experience to achieve optimal learning outcomes that have been determined.

Blended learning is an effective and efficient learning method that will solve the problems that occur, so that students will achieve the expected learning goals (Ross, 2016). Blended learning is a mixed learning method that combines face-to-face or conventional learning with offline and online learning which is expected to solve problems in physical education learning. Sports and health physical education subjects have material that focuses on combination learning that takes advantage of technological developments such as digital use, which is a new learning method and is being developed and introduced in the world of education (Vernadakis, 2015). Direct learning

in class using internet learning resources is called a blended learning strategy, which is a combination of face-to-face learning with online.

Blended learning combines offline (face-to-face) and online learning (students learn independently with online learning resources provided by the teacher). In supporting the online learning system, there must be an edmodo application. The edmodo application is an online application that can connect students and teachers in online learning. Edmodo is a social network specifically designed for education that can be used for physical education learning. Application. Students will have their own account with a special group code that has been created by the teacher. Assignments will be uploaded by the teacher to be accessed by students in groups through the edmodo application. In this application the teacher can also provide assignment scores, control student development.

Edmodo has advantages such as effectiveness, flexibility, easy access, and can provide material visually and non-visually. using edmodo can shorten the distance and meeting time so that students can learn material provided by the teacher anywhere and anytime. Learning using edmodo can give students full control of their own learning, students can adjust learning according to their abilities. The material used in the current learning is short distance running. Where sprinting is included in the 2013 curriculum.

Short distance running is one of the athletics and is a very prestigious number, because short distance running is one of the oldest branches in the world. Running short distances or also known as sprinting requires you to run as fast as possible in a short time (Rangga, 2013). Therefore we need the right technique. The start used in short sprinting is the squat start. There are several phases when you have to do a short run with a squat start, namely, the "willing" phase, the "ready" phase, the "yes" phase, the "transition" phase and ending with the "finish" phase.

The moment of the initial meeting begins with face-to-face learning material for short distance running with a squat start. Researchers explain short distance running material to students. Researchers explain in detail the phases of sprinting with a squat start. Then the students practiced one by one short distance running. After all the students tried to practice short distance running, the researcher immediately took the initial value of the face-to-face meeting of the short distance running material with a squat start. The results of early observations of face to face meetings conducted by researchers at SMK Bunda Kandung, South Jakarta, can be seen that there are still many students who cannot start block, accelerate and also make it to the finish line. From these results, it was found that student learning outcomes in both psychomotor and cognitive aspects were still relatively low. This could be due to the lack of motoric activity of students during learning and outside school, as well as limited cognitive activity during the learning process while the lack of learning resources that students can easily access.

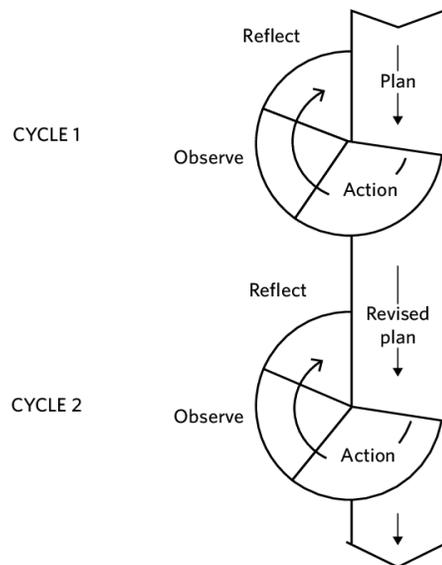
The implementation of the goals of physical education itself cannot be separated from the role of a teacher who has a very important role in the success of students, the teacher must be able to foster student interest in learning in order to obtain maximum learning outcomes. For this reason, teachers must be able to choose methods and approaches that are in accordance with the learning objectives. Students are always enthusiastic in participating in teaching and learning activities, teachers can use more attractive learning methods to make students more active physically and

mentally. One method that is in accordance with these objectives is the application of blended learning.

The blended learning method was deliberately chosen by researchers to increase the attractiveness of learning, so that students are more active in the learning process. Students are expected to be active psychomotor, cognitive and affective. Learning is carried out individually, from the beginning of the meeting, until the completion of the material provided. However, it is not only expected activity when participating in learning but also to carry out the process well. The teacher as a facilitator has the role of facilitating material to support knowledge so that when children are able to practice this theory. In field practice students will practice the theory that has been given, and the teacher provides examples of material to be taught. Students begin to apply the material that has been given by the teacher, when students cannot master the material, groups will be made for evaluation. After students work in groups the teacher gives quizzes or individual tests. The results of the quiz are then given a score and will be graded as a group score. After the individual and group scores are accumulated, the highest score will be obtained. This research is a means of proving the phenomenon of technological progress in the rapidly growing world of education and supporting data for the progress of student learning (Maksum, 2012). Blended learning can be used for modern learning solutions, so that students can study the material before practicing in the field to increase teaching achievement.

**METHODS**

Based on the research objectives carried out by researchers, the method used in this study is Classroom Action Research (PTK) (action research). Classroom Action Research is an examination of learning activities in the form of an action that is deliberately raised and occurs in a class together. The process model used is the spiral cycle process model which refers to the PTK Kemmis S, and Mc. Tagget. R as shown in Picture 1



Picture 1. Model PTK Kemmis S, and Mc. Tagget. R (Lakhal, Sevigny, & Frenette, 2014)

This cycle model includes the stages (1) planning (planning), (2) implementation (action), (3) observation (observation), and (4) reflection (reflection). Then it is continued from cycle to cycle, with the target that the subject's short distance running learning outcomes with the application of edmodo-based blended learning have increased. This research was conducted at SMK Bunda Kandung Jakarta in class X is 25 Students, Pasar Minggu, South Jakarta City. When the research was conducted in the second semester of the 2019/2020 academic year for 6 months, to be precise starting from August in December.

**RESULTS**

After carrying out several activity steps starting from cycle I to cycle II, the validity of the data was carried out. The purpose of checking the data in this study was to obtain valid and reliable data using valid and reliable instruments obtained by validating the instruments before being used in data collection. These instruments will be examined by expert lecturers in their fields using triangulation techniques. Triangulation techniques include triangulation of data sources and triangulation of triangulation techniques.

Triangulation of sources in this activity is carried out by checking the data obtained through several sources. In this study, researchers checked and matched data obtained through peer teachers, school principals and researchers themselves. Meanwhile, technical triangulation is done by examining data sources from the same source with different techniques. To get accurate and valid data, the researcher checked and matched the data obtained with observations in the form of field notes, instruments of short distance running learning outcomes, documents in the form of photographs and test scores of learning outcomes from each cycle as well as student group assessments. Initial observations show that students' lack of attention to learning is evidenced by the lack of student activity in learning, many students are idle waiting for their turn so that it affects the low learning outcomes in athletic learning competencies. The following is the distribution of the data on the initial short distance running test results for the X grade students of SMK Bunda Bunda Jakarta for the material of short distance running.

Table 1. Data distribution of the initial test results for short sprints

No.	Interval	Median	Fa	Fr
1	62,5 – 70,1	66,5	5	20%
2	70,5 – 74,0	73,1	11	44%
3	75,7 – 79,0	78,3	2	8%
4	80,9 – 86,0	83,5	5	20%
5	86,1- 91,2	88,7	2	8%
<b>Total</b>			25	100%

The table shows as many as 16 students (64%) have not reached the minimum standard score. The minimum standard score determined by the researcher was 75. Meanwhile, 9 students (36%) had reached the minimum standard. These results were analyzed to see the improvement in the basic technical skills of short distance running students using the edmodo-based blended learning system.

As the assessment of student participation in online learning cycle I was carried out, the average value of student participation in online learning was 73.28%, which means that the success in the category was declared quite good. Then the teacher uploaded the Quiz in the form of essay questions as many as 7 questions and as many as 10 students had worked on the Quiz, and 15 children were late filling in the Quiz so they did not get a knowledge score.

In the first cycle, it can be seen that there is an increase in the basic movements of students towards the short distance running material. In this test, all students who have passed the initial test take the test again in learning using edmodo (online) media previously through face-to-face learning (offline). The following is a data presentation using the first cycle group data of short-distance running carried out by class X students of Mother's Kandung Junior High School.

Table 2. Distribution of Test Data for Cycle I Run a short distance

No.	Interval	Median	Fa	Fr
1	65,3 – 70,4	67,9	1	4%
2	70,5 – 75,6	73,1	5	20%
3	75,7 – 80,8	78,3	8	32%
4	80,9 – 86,0	83,5	7	28%
5	86,1- 91,2	88,7	4	16%
<b>Total</b>			25	100%

From the data above, it shows that 20 students (80%) have completed while 5 students (20%) have completed the minimum completeness criteria, namely 75. online learning participation in cycle II with short distance running material is 83%, which means entered in the good category. The teacher also uploads Quiz questions in the form of essay questions. and all the students did the quizzes on time.

In cycle II, the data shows that students whose scores are below the minimum completeness criteria (KKM) 75 do not exist (0%) and it can be concluded that all students have completed the research in cycle II. Based on the distribution of data in table 3, it was found that students who had completed the second cycle were 25 students (100%) and students who had not completed 0 (0%).

Table 3. Distribution of Cycle II Test Data for Short distance running

No.	Interval	Median	Fa	Fr
1	65,3 – 70,4	67,9	0	0%
2	70,5 – 75,6	73,1	0	0%
3	75,7 – 80,8	78,3	11	44%
4	80,9 – 87,5	83,5	12	48%
5	88,5- 91,2	88,7	2	8%
<b>Total</b>			25	100%

The comparison of student participation in online learning between cycle I and cycle II can be seen in the table above as follows.

Tabel 4. Perbandingan Partisipasi Siklus I dan Siklus II

<b>Participation Indicator</b>	<b>cycle I %</b>	<b>Cycle II %</b>	<b>Increase %</b>
<b>Responses and Initiatives</b>	74	80	6
<b>Downloading</b>	76	76	-
<b>Comments</b>	65	78	13
<b>Accuracy of Tasks</b>	77	87	10
<b>Total</b>	262	328,68	66
<b>Average</b>	73,28	83	9,72

The table above shows that the results of student participation in online learning using edmodo have increased 9.72%. Furthermore, the comparison of online learning outcomes for short distance running material between cycle I and cycle II can be seen in the following table.

Table. 5 Comparison of Cycle I and Cycle II

<b>Material</b>	<b>Cycle I</b>	<b>Cycle II</b>	<b>Increase</b>
<b>Running Shorts Distance</b>	79,78	82,32	2,54%

Based on the results of this study, it shows that blended learning based on edmodo can improve learning outcomes for short distance running which can be seen from the increase in pre-test learning outcomes showing 9 students completed the increase, the increase occurred in cycle I to 20 students and continued in cycle 2 stage had an increase. the results of 25 students are complete. Based on the results, the subject has increased by providing blended learning-based learning.

## DISCUSSION

Blended learning has a mixed learning method, which combines face-to-face or conventional learning with offline and online learning. Blended learning allows students to be more motivated and more involved in the learning process, thereby increasing the commitment and persistence of students. The blended learning method with one of the learning components that uses interactive media in the delivery of short distance running material, this is a solution to adjusting learning styles at this time. Blended learning aims to build a balance between online learning and face-to-face learning, this is a complement to mastering the material with achievement indicators in the form of mastery of a certain motion (Shepperson, 2013).

The process of transforming material from educators to students must be right on target and easily understood by students, so that the teaching and learning process goes well in order to produce a

generation that is able to compete and answer future challenges. The existence of offline and online learning in blended learning can help facilitate the delivery of aspects of knowledge to students in learning short distance running material and can help students understand other motion learning processes. Constructivist learning theory allows students to build knowledge and learning skills in blended learning through their actual experience in a professional manner (Winklen, 2016). Thus the blended method can stimulate students to carry out learning independently and continuously, this is proven by increasing learning outcomes in short distance running material.

The process of implementing blended learning learning must pay attention to infrastructure, characteristics of students, time allocation, learning resources and constraints. Meanwhile, according to Knook (2018) the composition of blended learning is (1) 50/50%, which means that 50% of the time allocated for face-to-face activities and 50% for online learning activities (2) 73/25% means that the time allocation provided is 75% for face-to-face activities and 25% for online learning activities (3) 25/75% means that the time allocation provided is 25% for face-to-face activities and 75% for online learning activities (Ikart, 2019). This description will make it easier for teachers in learning and students more easily receive information, the existence of this learning concept is proven to be able to improve the learning outcomes of class X students as subjects. Seubject feels enjoy and it is easier to receive information to do in front of the teacher so that indicators in the form of learning outcomes will increase as in the results of research data.

## CONCLUSIONS

Based on the research results described, it can be concluded that edmodo-based blanded learning can improve learning outcomes for short distance running. Data can be seen from the increase in learning outcomes before blended learning, which shows the number of student completeness increases consistently with two systematic cycles. Edmodo-based blanded learning facilitates communication, a means of discussion, and students have knowledge / images before face-to-face learning is carried out, thus helping to achieve values according to the minimum completeness criteria (KKM).

## REFERENCES

- Huston, J. (2016). Health-Realated Fitness Models in Physical Education. *Journal of Physical Education, Sport, Health and Recreation Journal of Physical Education*, 5(4).
- Ikart, E. M. (2019). Survey Questionnaire Survey Pretesting Method : An Evaluation of Survey Questionnaire via Expert Reviews Technique. *Journal of Agricultural Education and Extension*, 4(2), 1–17. <https://doi.org/10.20849/ajsss.v4i2.565>
- Knook, J., Eory, V., Brander, M., Moran, D., Knook, J., Eory, V., ... Knook, J. (2018). Evaluation of farmer participatory extension programmes Evaluation of farmer participatory extension programmes. *Journal of Agricultural Education and Extension*, 7(6), 1–17. <https://doi.org/10.1080/1389224X.2018.1466717>

- Lakhal, S., Sévigny, S., & Frenette, É. (2014). Personality and student performance on evaluation methods used in business administration courses. *Advances in Health Sciences Education*, 5(3), 44–56. <https://doi.org/10.1007/s11092-014-9200-7>
- Maksum, T. C. M. and A. (2012). *Sport Development Index, Alternatif Baru Mengukur, Kemajuan Pembangunan Bidang Keolahragaan, Konsep, Metodologi dan Aplikasi*. Jakarta: Indeks.
- Mubarak, H. (2012). Hubungan Antara Intensitas Latihan SKJ 2004 Dengan Tingkat Kesegaran Jasmani Pada Siswa SMP Negeri 2 Barru Kabupaten Barru. *Jurnal Penelitian Fakultas Ilmu Keolahragaan Universitas Negeri Makassar*, 5(6), 77–89.
- Pablo, J. D. S. De. (2016). Olahraga dan Pendidikan Jasmani dalam Keutuhan NKRI. *International Conference Od Education*, 7(7), 55–67.
- Rangga, Y. (2013). Perbandingan Tingkat Kebugaran Jasmani Siswa Kelas IX Rintisan Sekolah Berstandar Internasional SMP 1 Kawedan dan Siswa Kelas IX Sekolah Standar Nasional SMP 2 Kabupaten Magetan Pada Tahun 2013. *Jurnal Penelitian Surabaya*, 5(7), 113–125.
- Ross, S. M. (2016). Motivation, Learning Strategies, and Performance in Physical Education at Secondary School. *Journal American Physical Therapy Association*, 5(4), 23–35.
- Shepperson, T. L. (2013). Prevalence of Evaluation Method Courses in Education Leader Doctoral Preparation. *Advances in Health Sciences Education*, 8(1), 1–14.
- Vernadakis, N. (2015). Assessing dance: A phenomenological study of formative assessment in dance education. *Journal American Physical Therapy Association*, 5(7), 100–119.
- Winklen, C. (2016). Using developmental evaluation methods with communities of practice. *Advances in Health Sciences Education*, 5(6), 55–67. <https://doi.org/10.1108/TLO-08-2015-0047>