

## The Influence of Online Learning Models and Learning Interests Toward Learning Outcomes of Lay Up Shoot Basketball

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### Abstract

The appropriate learning model is the key to success. The purpose of the study was to analyze the effect of the Self Organized Learning Environment (SOLE) and Introduction Connection Application Reflection Extension (ICARE) learning models on lay-up basketball learning outcomes. Experimental research method with a 2x2 Factorial Design research design. The number of samples is 32 in class XI. The independent variables are the SOLE and ICARE learning models, the attribute variables being high and low interest in learning. The dependent variable is lay-up shoot basketball learning outcomes. The instrument is a test of attitudes, knowledge and skills. Data analysis used two way ANOVA. The results of the study: 1) the influence of the learning model is on the attitude aspect  $F_{count} = 6.29 > F_{table} = 4.18 / p = 0,018$ . Knowledge aspect  $F_{count} = 1.12 < p = 0,299$  and skill aspect  $F_{count} = 1.32 < F_{table} = 4.18 < p = 0,260$ . 2) there is no difference in the effect of the learning model on the attitude aspect  $F_{count} = 2.32 < F_{table} = 4.18 < p = 0,139$ , the knowledge aspect  $F_{count} = 3.02 < F_{table} = 4.18 < p = 0,093$  and the skill aspect  $F_{count} = 3.45 < F_{table} = 4.1 < p = 0.073$ . 3) there is an interaction between the learning model that simultaneously influences students' learning interest in the attitude aspect  $F_{count} = 40.00 > F_{table} = 4.18 / p = 6,564$ . Knowledge aspect  $F_{count} = 3.10 < F_{table} = 4.18 < p = 0,089$  and skill aspect  $F_{count} = 0.11 < F_{table} = 4.18 < p = 0,743$ . Conclusion SOLE and ICARE learning models can increase students achieving lay-up shoot learning outcomes. The improvement shown by students is only in the attitude aspect of students who can work together with their friend.

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## INTRODUCTION

Learning that will be applied to students must be prepared from the beginning because the learning that will be given to students cannot be given spontaneously which results in the teacher providing less than optimal learning material. Things that need to be given must be designed properly so that the learning materials given to students can be delivered to the maximum and learning objectives can be achieved (Usman, Khairul., Soekardi., & Pramono, Harry, 2016). Law Number 20 of 2003 concerning the National Education System (SISDIKNAS) explains that "Learning is a process of interaction between students and educators and learning resources in a learning environment".

Teachers who achieve success in the learning process are carried out in their own ways and adapted to existing conditions, the ways that teachers apply are such as applying teaching styles / learning methods / learning models that have goals in the learning process. No teacher wants to achieve the maximum learning process without using teaching styles/learning methods/learning models. This needs to be considered because it will provide useful things for students (Syarif., & Winarni, 2015). The learning model is a method that is applied by educators to achieve a goal in the learning process that will be carried out and before the activity process begins the educator prepares a plan or activity that has been prepared with the learning model that will be used (Ishak, 2017).

Movement skills are very important to note because over time the development of students. One of them is the movement of walking, running, jumping, throwing and others. All the movements need to be done repeatedly so that the movements made are better and in accordance with the movements they should be. In education there are physical education subjects, sports and health, where PJOK subjects are found at all levels by developing the potential of students. Husdarta (2011: 18) Physical education is an educational process that

utilizes physical activity through motion or games and sports in which there is a meaning that certain selected movements, games or sports are only tools to achieve goals in education. The application of physical education through the activities carried out can develop so that it can explore the potential that exists within itself, through the activities carried out and can control emotional feelings and socialize with the surrounding environment (Pambudi., & Kartiko, 2017).

Physical education is designed with various types to improve thinking skills, be honest, apply a healthy lifestyle and maintain physical fitness (Rahayu, Puji., Rahayu, Tandiyoo., & Rc, Achmad Rifai: 2017). For the SMA/SMK level, one of them is a big ball game, namely basketball. Basketball is a game that is played in groups or in teams, in the game of basketball, focus is needed to be able to carry out basic movements such as throwing or catching the ball and shooting the ball into the basketball hoop. All body parts are used in this game (Candra, O., Dupri, Gazali, N., Khairullazi., & Oktari, A, 2019). Performing movements in basketball in various ways, namely by throwing the ball, catching the ball, bouncing the ball, shooting the ball towards the basketball hoop, rotating motion in all directions with one foot axis, lay-up shots, and rebounds (Muhtarom, 2018). The combination of the lay up shoot movement is very important to note, errors in laying up shoots will affect the inaccuracy in doing lay up shoots, therefore it is necessary to take the right steps to prioritize the success of doing lay up shoots (Mertayasa, Ketut., Rahayu, Setya., & Soenyoto, Tommy, 2016).

The ongoing learning of sports and health physical education by observing at SMK Yadika 13 Tambun in the learning process the learning material given by the teacher to students is the lay up shoot technique. The lay up shoot learning provided by the teacher makes students less enthusiastic to do so because the learning process is not interesting for students so that the unstable learning interest felt by students in improving their movement abilities and teacher

creativity is not effective when the learning process takes place.

Feeling comfortable in the learning process is very important to note because it can make a learning condition conducive and focus on students in the learning they do so that students can be encouraged to do learning. In learning not only one or two people per class but the number of students in the class, therefore what if the learning received by students according to him is not interesting and gets a saturation point then when it is applied it will be indifferent or lazy to follow it. If that condition occurs, how can students absorb new knowledge so that the learning objectives become less than optimal (Ariyanto, Eko, 2013).

Improper application has an unfavorable impact, especially if the learning material is difficult for students to understand. If what students feel is a high interest in learning, it will make students feel the desire to be able to carry out the movements they will do. His initial interest was the acceptance he experienced from within or something outside himself so that he felt comfortable without being burdened (Vernanda, I. Putu Wisnu Octa., Rahayu, Setya., & Handayani, Oktia Woro Kasmini, 2016). The desire to be able to gain new knowledge or carry out a new movement becomes a great desire. The self-development that is in him will increase his ability so that students are able to make new movements or find out new knowledge (Rifka., Imran., & Yunitaningrum, Wiwik, 2013).

One of the students who carry out the learning process. The virus, namely corona virus disease 2019 (COVID 19), is a virus that spreads very quickly. The existence of the virus has changed the situation in schools where previously the learning process carried out by teachers to students was carried out in schools directly or face to face, but for now the learning process is carried out. When face-to-face learning is carried out, the learning model applied to students has many choices, but the situation in the learning process is now different since the outbreak of a virus that threatens the health of

the Indonesian people, including out from home.

Changes in the learning process that occur due to the impact of the virus make teachers follow the adjustment of the situation, namely learning ONLINE (in the network). When the researchers made observations during the pandemic at Yadika 13 Tambun Vocational School, the corner teacher stated that it was difficult to carry out the learning process through ONLINE (on the network) because many students were not present in the learning process coupled with the difficulty of students in doing the assignments given and the teacher have not been able to adapt the ONLINE learning model (in the network) so that the learning that has been carried out is less than optimal. The researcher tried to apply an online learning model that the researcher hoped would have a good impact on improving student learning outcomes during the COVID 19 pandemic. The researcher chose the ICARE (Introduction Connection Application Reflection Extension) and SOLE (Self Organized Learning Environments) learning models in the implementation of the learning process.

The ICARE learning model is one of the learning models related to students' understanding of the concepts of learning materials and learning activities so that students can apply their knowledge. students are given direction so that they can begin to respond to the knowledge they have then students can prove the truth of the knowledge they have then students can explain freely regarding the learning materials that they have obtained through their learning resources after that students are given an opportunity to better understand the learning material so that understanding students about stronger learning materials (Handayani, ET, Herdini, & Susilawati, 2021).

The SOLE (Self Organized Learning Environments) learning model is a learning model that prioritizes the independent learning process, by carrying out an independent learning process carried out by students where students want to learn through the use of the internet and

their smart devices. By using the SOLE (Self Organized Learning Environments) learning model, teachers can dig deeper into the understanding of learning material to students by utilizing the curiosity of students (Wati, 2020).

## METHODS

This study uses a research design that is a 2x2 factorial design because it uses two learning models, namely the ICARE (Introduction Connection Application Reflection Extension) and SOLE (Self Organized Learning Environments) learning models and learning interests, namely high and low learning interests. Researchers use experimental research methods because they can determine the effect of the investigated variables. Experimental research tries to make something happen to the dependent variable through a series of treatments or treatments as independent variables or causal variables. Researchers treated the ICARE (Introduction Connection Application Reflection Extension) and SOLE (Self Organized Learning Environments) learning models at the time of PJOK learning and also to a predetermined sample.

The population as a source of data in this study were students of class XI SMK Yadika 13 Tambun with a total of 268 students. Sampling using cluster sampling technique, namely taking samples by randomizing the class in class XI. After that, using the 27% percentage technique. The group that will be divided into two in a balanced state is achieved at 27% for the high group and the low group so that each group gets the same number of group members. The division of groups according to the criteria of sampling that has a high interest in learning and those who have a low interest in learning from each group. There were 16 samples for students

who had high interest in learning and 16 students who had low interest in learning, so the total sample was 32. The samples consisted of male students and female students were divided into 4 groups and each group consisted of 8 students. Thus obtained 4 groups, each of which consists of two groups of students who have a high interest in learning and two groups of students who have a low interest in learning..

In this study, the researchers determined the independent variable, namely the learning model, in which the learning model was divided into two levels including the SOLE (self organized learning environment) learning model and ICARE (Introduction Connection Application Reflection Extension) learning model. The two learning models were applied to the sample and treated for only three weeks or three meetings, in one week only one treatment or treatment was carried out and the implementation time was 60 minutes according to the learning time. Attribute variables are adjusted to the problems faced by researchers, namely interest in learning, interest in learning is divided into two levels including high interest in learning and low interest in learning because the variables cannot be manipulated (control). In the dependent variable, namely the learning outcomes of basketball lay up shoot at SMK Yadika 13 Tambun, Bekasi Regency, West Java.

The prerequisite test in this study was the normality test and homogeneity test. Meanwhile, the data analysis used the Analysis of Variance (ANOVA) or Indonesianized into two-way ANOVA (analysis of variance).

## RESULTS AND DISCUSSION

The hypothesis testing calculating by analysis of variance, can be seen in the table below.

**Table 1.** The average value of lay up shoot basketball learning outcomes

Online Model	Learning	Pre-test and Post test	Interest to learn	Learning outcome aspects			Average
				Attitude	Knowledge	Skills	
SOLE	Pre-Test		Low	67	68.38	62	71.02
			Tall	81.75	79	68	
	Post-Test		Low	71.25	69.25	74	75.75
			Tall	79.25	84.75	76	
ICARE	Pre-Test		Low	73.38	82.88	67.63	77.23
			Tall	81.38	84.63	73.50	
	Post-Test		Low	77	88.5	78.88	82.27
			Tall	80.5	84.63	84.13	

Description:

SOLE (Self Organized Learning Environment)

ICARE (Introduction Connection Application Reflection Extension)

**Table 2.** Normality test

Online Learning Model	Normality test	Interest to learn	The results of the normality test in the lay up shoot learning aspect			Lilliefors table	$\alpha$
			Attitude	Knowledge	Skills		
SOLE	Lilliefors count	Low	0.266	0.133	0.222	0.285	0.05
		Tall	0.262	0.139	0.211		
SOLE	Lilliefors count	Low	0.250	0.254	0.208	0.285	0.05
		Tall	0.254	0.209	0.166		

**Table 3.** Homogeneity Test

Learning model	Interest to learn	Chi kuadrat count			Chi kuadrat table
		Attitude	Knowledge	Skills	
SOLE and ICARE	Tall and low	3.47	1.76	0.41	7.81

**Table 4.** Summary of the results of the two-way ANOVA calculation on the learning outcomes of lay up shoot

Variant Source	Fcount						Ft	$\alpha$
	Attitude	P	Knowledge	P	Skills	P		
Learning model	6.29	0.018	1.12	0.299	1.32	0.260	4.18	0.05
Interest to learn	2.32	0.139	3.02	0.093	3.45	0.073	4.18	0.05
Interaction	40.00	6.564	3.10	0.089	0.11	0.743	4.18	0.05

Hypothesis testing can be explained as follows:

**The effect of the SOLE and ICARE learning models on learning to lay up shoot basketball**

The aspect of student attitudes are  $F_{count}(b)=6,29 > F_{table}(b)=4.18$  at a confidence level of 0.05, the hypothesis is

accepted, so that there is an effect of the ICARE learning model (Introduction Connection Application Reflection Extension) with the SOLE (self organized learning environment).

In the learning process that is applying the ICARE (Introduction Connection Application Reflection Extension) learning model and the SOLE (self organized learning environment)

learning model, some students give an opinion to their group mates so that discussion occurs in the group. The results of research conducted by Mazidah, Nilam., Kartini, Titin., & Kantun, Sri (2020) show that using ICARE's Introduction Connection Application Reflection Extension can make students active thereby increasing their activities and learning outcomes. In addition, the results of Ana Fatwatush Sholichah's research (2019) showed that there were good results including students being active in finding answers about the material being taught and students contributing to their groups.

Aspects of student knowledge are  $F_{count}(b)=1.12 < F_{table}(b)=4.18$  at a confidence level of 0.05 then the hypothesis is rejected. there is no significant effect because in the learning process using the ICARE (Introduction Connection Application Reflection Extension) learning model, students learn independently in understanding the lay up shoot material. deepening the lay up shoot learning material, students rarely ask questions when students do not understand the learning material so that one of them causes a lack of understanding in the lay up shoot material. In the lay-up shoot learning process, it is important to supervise learning activities that need to be considered so that all students can use learning opportunities diligently. The ICARE (Introduction Connection Application Reflection Extension) learning model is a learning model that requires more supervision so that it can control everything. In the ICARE (Introduction Connection Application Reflection Extension) learning model, the use of the ICARE (Introduction Connection Application Reflection Extension) learning model system can ensure that students get these opportunities from what they have learned (Noge, Maria Desidaria, 2017). Meanwhile, students who used the SOLE (self-organized learning environment) learning model showed that students participating in the learning process with lay-up shoot learning materials had no significant effect because only a few answered the correct questions. Students tend to

rely on each other so that their critical thinking does not appear.

Students should learn independently but in the SOLE (self organized learning environment) learning model it has to do with collaboration with other students because this learning model requires the formation of an organized group. The formation of small groups to maximize the achievement of student learning outcomes.

This SOLE (self organized learning environment) learning model gives students the freedom to control learning. The teacher's role in the learning process that uses the SOLE learning model as a facilitator is that the teacher only observes and supervises students in the learning process that is being carried out. The teacher can see each group, one of which looks like the interaction between students or the activity of students in the group because in this learning process students find new things related to the material being studied and also students can share knowledge with other students in the same group. In addition, students can give opinions to their groups (Haryadi, Sugeng, 2020).

Aspects of student skills are  $F_{count}(b)=1.32 < F_{table}(b)=4.18$  at a confidence level of 0.05 then the hypothesis is rejected, there is no effect in learning lay up shoot because of the ICARE (Introduction Connection Application Reflection Extension) learning model, students are directed to learn independently and also students can ask online questions to the teacher, when the research was carried out students did not do lay up shoot movements in many repetitions and also students tended to be more like just reporting a task that the student has done, without a great desire to be able to do the lay-up shoot well. So that there is no increase in students in doing lay up shoots.

The influence of the ICARE learning model is not benefited by students in doing independent learning, besides that it is clear that the ICARE learning model is a learning model that is carried out independently and also carried out in groups. The ICARE learning model is a learning model that is easy to apply, this

learning model provides a learning experience for students to be directly applied so that it can provide benefits for students, besides that this learning model can have an impact on students' self-character. In the ICARE learning model to make it easier for students to learn the material they get (Haryadi, D. N., & Nurhayati, S., 2015).

Students who perform lay up shoot skills using the SOLE (self organized learning environment) learning model show that there are no students in doing lay up shoot movements continuously and also when students have difficulty students rarely ask the teacher so that the movements carried out are not optimal. which resulted in the SOLE (self-organized learning environment) learning model not giving maximum effect in improving students' skills when doing lay-up shoots. This is not in line with the SOLE (self organized learning environment) learning model that should be, that this learning model is for deepening students in understanding learning material by utilizing the curiosity possessed by students. The application of the SOLE (self organized learning environment) learning model has a goal, namely to form the abilities (skills) possessed by students (Yudi Setiadi, 2020).

#### **Differences of students with high and low interest in learning toward learning outcomes lay up shoot basketball**

The student's attitude aspect are  $F_{count}(k)=2.32 < F_{table}(k)=4.18$  at a confidence level of 0.05, the hypothesis is rejected, in the attitude aspect the results show that Both of these learning models do not provide a significant difference in learning lay up shoot for students who have high and low interest in learning.

when it is applied to students who have high and low interest in learning, it shows that students who have high interest in learning follow the learning process by only providing input or opinions to their group friends, it is seen when students are given time to discuss and are given time to deepen the lay learning material. up shot. While students who have low interest in

learning, some students just join in without finding out first independently related to the learning material being studied.

The SOLE (self organized learning environment) learning model which is applied to students who have high and low interest in learning shows that students who have a high interest in learning in participating in the learning process show that students are looking for answers to answer questions that have been given, in the search when something goes wrong. one friend found the answer, some group members were reluctant to look for another answer in order to strengthen the previous friend's answer and prove the answer is correct. Meanwhile, students who have low interest in learning indicate that students tend to rely on each other so that the time for discussion and seeking answers is not optimal.

This makes input in improving student learning outcomes because in using the SOLE (Self Organized Learning Environments) learning model it is explained that the SOLE (Self Organized Learning Environments) learning model is implemented for students, this model is designed to assist teachers in the learning process because by This learning model can encourage students' curiosity that is within them, by carrying out a learning process based on students (Firdaus, FM, Arum, PN, Riyani, S., & Utomo, J, 2021).

The results of the two-way analysis of variance (ANAVA) on aspects of student knowledge are known ( $F_{count}(k) = 3.02 < F_{table}(k) = 4.18$  at a confidence level of 0.05, the hypothesis is rejected, the hypothesis is rejected, there is no difference in the results. lay up shoot learning significantly which has high and low interest in learning. It can be seen from the knowledge aspect that in the learning process that uses the ICARE (Introduction Connection Application Reflection Extension) learning model, students who have a high interest in learning show that some students get an understanding of lay up shoot learning material by describing their findings to their friends, but students who have an interest in high learning does not focus even higher in exploring the

learning material and it is the same with students who have low interest in learning the same as high interest in learning, only for students who have low interest in learning students tend not to be able to compensate for further evidence related to the material being studied so that the impact is not significant.

This makes the students' understanding less than optimal in learning the lay-up shoot material in knowledge. A good impact can be obtained if only students can focus more on understanding the learning material. Through the ICARE learning model, students have the opportunity to study learning material because this learning model focuses on understanding and applying it in students' knowledge so that students better understand the learning material being studied. to students according to their abilities (Carni, Maknun, J., & Siahaan, P, 2017).

The SOLE (self organized learning environment) learning model is applied to students who have high and low interest in learning. In students who have high learning interest, it shows that some students are looking for answers to answer the questions given, as well as low learning interests who are looking for answers to answer the questions given so that they are both able to understand the learning material even though it is not optimal because students are only looking for it. accompanied by student understanding in the lay up shoot learning material so that the increase in student knowledge becomes less than optimal. In increasing students' knowledge, this has no impact in the application of SOLE (self-organized learning environment), besides that this learning model is a SOLE learning model that is very influential on the concept of learning and teaching which frees students to control the learning process to create their own meaning and subject (Asmawati , L., Hidayat, S., & Atikah, C, 2021).

The aspects of student skills are known  $F_{count}(k)=3.45 < F_{table}(k)=4.18$  at a confidence level of 0.05 then the hypothesis is rejected, there is no difference in lay up shoot learning outcomes on high learning interest and

low learning interest In the high and low learning interest groups, it shows that students are seen only doing the lay up shoot once and students are also less than optimal in improving the lay up shoot movement carried out at their respective homes. This is different in terms of ICARE and SOLE. in the ICARE learning model a learning model that requires students to be able to apply the learning materials they have obtained (Wahyuni, D., Rasmiwetti., & Herdini, 2021) while in the SOLE learning model more emphasis is placed on the independent learning process carried out by anyone who wants to learn. learn by utilizing the internet and existing technology or smart devices they have (Kusasi, 2021).

#### **The interaction between learning models and students' interest in learning toward learning outcome lay up shoot basketball**

The aspect of student attitudes are  $F_{count}(I)=40.00 > F_{table}(I)=4.18$  at a confidence level of 0.05 then the hypothesis is accepted, there is an interaction between online learning models and students' interest in learning to lay up shoot learning outcomes. during the learning process interest in learning has a role in the learning process. Some students are seen looking for, finding and getting to be used as learning outcomes in understanding learning material so that things like that make a good impact on students' interest in learning. The results of research by Ardiyani, NKD, Darmawiguna, IGM, & Sindu, IGP (2017) related to the ICARE (Introduction Connection Application Reflection Extension) learning model showed that students in their groups became active in interactions such as giving their opinions to others so that they could help their group members and the problems they faced. encountered can be solved. In addition, the research results of Firdaus, F. M., Arum, P. N., Riyani, S., & Utomo, J. (2021) in applying the SOLE learning model during the Covid-19 pandemic. It can be seen that there is an increase in the average score of students' independence. In the learning process applied to students, students are given the freedom to find references



or learning resources, one of which is using technology, namely internet access.

Aspects of student knowledge are  $F_{count}(I)=3.10 < F_{table}(I)=4.18$  at a confidence level of 0.05, the hypothesis is rejected, there is no interaction between online learning models and students' interest in learning to lay up shoot learning outcomes. The above results show that in lay up shoot learning when the ICARE (Introduction Connection Application Reflection Extension) and SOLE (self organized learning environment) learning models are applied to interest in learning, namely high and low interest in learning, it does not have a greater impact. good so that the maximum learning achievement is not satisfactory. Although this learning is done independently but not all students do it independently in the learning process so that students' understanding becomes less than optimal in achieving learning outcomes. Because the ICARE learning model is more towards an independent learning process, meaning that students are more active in discovering new things that are being studied. ICARE's self-organized learning environment is also a learning model that can provide an opportunity for students to be able to apply the knowledge they have gained. consists of five stages, namely introduction which means introduction, connect which means to connect, apply which means to apply, reflect which means reflection and extend which means to continue (Arwina, T, 2021). While in the SOLE (Self Organized Learning Environments) learning model, a learning model that prioritizes the independent learning process, by carrying out an independent learning process carried out by students where students want to learn through the use of the internet and their smart devices. By using the SOLE (Self Organized Learning Environments) learning model, teachers can dig deeper into the understanding of learning material to students by utilizing the curiosity of students (Wati, 2020).

Aspects of student skills are known  $F_{count}(I)=0.11 < F_{table}(I)=4.18$  at a confidence level of 0.05, the hypothesis is rejected, there is no interaction between the online learning

model and students' interest in learning to lay up shoot learning outcomes. In lay up shoot learning in a state the learning process is carried out online by students. Students learn independently in improving their skills in doing lay up shoot movements. However, the learning process experienced by students is not done well. There is not great desire to be able to do lay up shoot movements. This makes the increase in students not obtained properly because the learning process is carried out online so that it affects students' interest in learning. The interest in learning that arises within makes a great desire for the desired thing. (Khamidi, Amrozi, 2011).

## CONCLUSION

SOLE and ICARE learning models have an influence on the lay up shoot learning outcomes for students, the results can increase students achieving lay up shoot learning outcomes. The improvement shown by students is only in the attitude aspect of students who can work together with their friends. There is no significant difference between the SOLE and ICARE learning models because both of these learning models do not provide a very high increase so that the achievement of lay up shoot learning outcomes is less than optimal. The results of the lay up shoot learning did not increase in height, but from both SOLE and ICARE learning models there were still interactions that simultaneously affected high and low interest in learning to lay up shoot learning outcomes, from the three aspects of learning outcomes only the attitude aspect was there is an interaction with the ICARE and SOLE learning models even though the interaction of students' interest in learning is not maximal, that not all aspects have increased or no significant effect on the lay-up shoot learning outcomes.

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