Analysis Of Differences In Student Learning Outcomes In Educational Research Courses Using The Arias Learning Model (Assurance, Relevance, Interest, Assessment, Satisfaction)

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Abstract

The aim of this research is to determine differences in student learning outcomes in Educational Research courses using the ARIAS learning model. The research method is a quasi-experimental method. The sampling technique was simple random sampling. The sample is students from Class 2021 class F as the experimental class and students from Class 2021 class G as the control class. The data collection technique uses tests and non-tests. The instruments are objective tests of the multiple choice type and non-test instruments in the form of questionnaires. The data obtained were analyzed using the prerequisite normality test and homogeneity test. The results of the t-test carried out using the SPSS program showed that the tcount value was greater than the ttable value, meaning that there was a significant difference in the learning outcomes of students in the experimental class and the control class, so it could be concluded that there was a difference in student learning outcomes in the Educational Research course. using the ARIAS learning model.

Keywords:*Learning OutcomesARIAS*

INTRODUCTION

Learning is a process of interaction or reciprocal relationship that occurs between educators and students in delivering information or materials in order to achieve effective and efficient learning objectives. The problems in Indonesia include the lack of quality human resources and the low quality of education. Several efforts have been made, including the provision of learning equipment in the form of books and learning facilities, training to improve the competence of educators and curriculum development. The role of teachers as educators is actually a facilitator in delivering information in the form of materials to students.

The compulsory course in the Physical Education, Health and Recreation Study Program is Educational Research. Educational Research is an investigation of a field of science that is carried out to obtain facts or principles patiently, carefully and systematically in the field of education. The purpose of studying the Educational Research course is so that students are able to master the systematics and methodology of research for education, both qualitative and quantitative, skilled in conducting research for education, both qualitative and quantitative.

Based on the results of interviews with PJKR students at Insan Budi Utomo University. The results showed that 80% of students were less interested in the Educational Research course. This is because they consider Educational Research to be less related to the world of sports. This fact makes the Educational Research course seem less meaningful. It is not surprising that the learning outcomes of the Educational Research course for PJKR students, especially at Insan Budi Utomo University, are still relatively low. In each final semester exam, only 25% to 35% of students meet the KKM.

Efforts to improve learning outcomes in the Educational Research course at Insan Budi Utomo University require the application of innovative learning methods in the teaching and learning process that provide opportunities for students to be active. The existence of a learning atmosphere that encourages students as the main factor will attract students to have more desire to respond to the material and interact with other students. A learning atmosphere that makes students share

knowledge both when discussing and answering questions during presentations.

Improving learning outcomes that affect student activity can use the ARIAS learning model. The ARIAS learning model is able to motivate students to be more active with its five components, namely: Assurance (self-confidence), which is related to an attitude of trust, confidence in success or related to the hope of success. Relevance, which is related to students' lives, either in the form of current or existing experiences or related to future needs, Interest is related to students' interests/attention. Assessment is related to student evaluation and Satisfaction is related to pride, satisfaction with the results achieved (Dewi, 2007).

The learning model that allows students to interact with each other is the cooperative learning model. The cooperative learning model helps students learn every subject from basic skills to problem solving. Cooperative learning has several types, one type of cooperative learning model that can build self-confidence and encourage their participation in class is the Think-Pair-Share cooperative learning model (Widarti, 2007). The Think-Pair-Share cooperative learning strategy gives students more time to think to respond and help each other. The teacher only estimates and completes a brief presentation, while students read assignments or learning materials that are not yet known. During the teaching and learning process, students appear to be heading towards fulfilling their own intellectual needs and developing potential individuals by involving students as thinkers rather than knowledge collectors (Chotimah, 2009).

Therefore, the researcher wants to know the differences in learning outcomes of PJKR students at Insan Budi Utomo University in the Educational Research course using the ARIAS learning model.

RESEARCH METHOD

The research used a quantitative approach with an experimental research type (Moleong, 2015). The method is a quasi-experimental method. The design used is a non-equivalent control group design (Suharsini, 2010). The sample was some PJKR students. The sampling technique was simple random sampling. The sample was 25 students from the 2021 Class F class as the experimental class and 25 students from the 2021 Class G class as the control class. The data collection technique used tests and non-tests. The instruments were multiple-choice objective tests and non-test instruments in the form of questionnaires. This data was analyzed using the Levene homogeneity prerequisite test and Kolmogorov Smirnov normality. Then tested with a t-test with the SPSS program.

RESEARCH RESULTS AND DISCUSSION

1.1. Research result

The results of the research can be seen in table 1 below:

Table 1. Results of Hypothesis Test Calculation

Statistics	*Pretest*	*Posttest*
t_{count}	1,49	3,89
t_{table}	2,021	2,021
Decision	H_a rejected	H_a accepted

In table 1 above, the results are pretest t value is obtained$_{count}$ is 1.49 and the t value$_{table}$ is 2,021, t value$_{count}$ smaller than t_{table}, so that the null hypothesis (H_{the}) is accepted and the alternative hypothesis (H_a) is rejected. This means that there is no difference between the results of pretest experimental class and control class significantly.

In table 1 above, the results are posttest value is obtained$_{count}$ is 3.89 and the t value$_{table}$ is 2,021 t values$_{count}$from the results posttest greater than t_{table}, so that the null hypothesis (H_{the}) is rejected and the alternative hypothesis (H_a) is accepted. This means that there is a difference between the results posttest

experimental class and control class significantly. The average learning outcomes of students in the experimental class increased compared to the average learning outcomes of students in the control class.

Learning using ARIAS can improve learning outcomes more significantly than conventional learning, the results of the normal gain test (*N-gain*) the experimental class is higher compared to the control class. In the experimental class the valueN-gain of 0.81 indicates a high category and the control class of 0.63 with a medium category. Learning outcomes in the $_{experimental}$ class increased after conducting learning*ARIAS* compared to the increase in student learning outcomes in the control class.

1.2. Discussion

After both classes were given different treatments of *ARIAS*, the average value of the two classes is different. Based on the results of the hypothesis test, the average value of the posttest between the control class and the experimental class. The t value was obtained$_{count}$ greater than the t value$_{table}$ namely 3.89>2.021, meaning there is an effect*ARIAS* on improving student learning outcomes in Educational Research. There is a difference in the average value of the results posttest, Students in the experimental class obtained an average score of posttests higher compared to students in the control class. The results of this study are also supported by research (Marzekri, 2021) that the application of *ARIAS* can help parents and kindergarten teachers to teach and introduce the functions and names of body parts to children. Application *ARIAS* In learning about human anatomy, digital media such as smartphones can be easily accessed anytime, anywhere and provides effective and efficient learning information offline. *(Nauko and Amali, 2020).*

CONCLUSION

It is concluded that*ARIAS* can improve student learning outcomes in Educational Research learning.

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