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PROBLEM BASED LEARNING INFLUENCE MODEL ON THE ECONOMIC LEARNING OUTCOMES OF STUDENTS OF CLASS X PUBLIC SENIOR HIGH SCHOOL 1 PEGAJAHAN ACADEMIC YEAR 2021/2022

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ABSTRACT

The problem in this study is the low economic learning outcomes of class X students of SMA Negeri 1 Pegajahan for the 2021/2022 academic year. This study aims to determine the effect of the problem based learning model on students' economic learning outcomes on the subject of financial service institutions in class X SMA Negeri 1 Pegajahan for the academic year 2021/2022. This research was conducted at SMA Negeri 1 Pegajahan which is located on Jalan Besar, Bengabing Village, Pegajahan District, with a population of 210 students and a sample of 71 people in 2 classes. The X-3 class as the control class and the X-4 class as the experimental class. The technique used in sampling is purposive sampling. The results of the research show that the learning outcomes learned with the problem based learning model are higher than the learning outcomes taught with the conventional methods. The results of the statistical test showed that the students' learning outcomes in the pre-test with the problem-based learning model were 41.52 and the post-test was 80. Meanwhile, student learning outcomes in the pre-test with the conventional model were 49.71 and the post-test was 73. The results of hypothesis testing obtained t arithmetic > t table are 2.936 > 1,667 at a significant level of 95% and = 0.05. Thus, it can be concluded that there is a positive and significant effect between the use of the Problem based learning model on the economic learning outcomes of class X SMA Negeri 1 Pegajahan Academic Year 2021/2022 on the subject of financial service institutions.

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1. Introduction

Education plays an important role as a means to create quality human resources so that they are ready to compete in the world of work. The problem of low quality of human resources is one of the factors that can increase the unemployment rate. Education is a means to improve quality human resources because education is considered capable of producing quality workers and able to survive in the world of

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work. One of the things that can be used as a measure of the quality of the output is how human resources are able to compete in the world of work and are expected to be able to drive a better economy.

So far, most of the learning activities at the secondary school level still emphasize on changing thinking skills at the basic level and have not maximized students' higher-order thinking skills. Whereas higher order thinking skills are also very important for mental development and changes in students' mindsets. This is because in the learning process the teacher still uses conventional learning approaches (lectures, questions and answers, exercises/tasks) and the learning process is dominated by teachers (Teacher-Cenred) who generally use the lecture method, this will result in reduced effectiveness and not centered on students. Learning that allows students to be busy with their respective activities without playing an active role in learning, results in students being less interested in the learning process that will take place. It is feared that conventional learning that is still used will make students less interested in learning. Therefore, it takes a way that is able to make students interested in learning.

Currently, most students still show a passive attitude in the teaching and learning process, even though the teacher has tried to motivate and provide opportunities to actively ask questions, answer questions, provide opinions, thoughts and ideas to solve a problem that arises in the teaching and learning process. Low self-confidence of students and also a rigid and less challenging learning atmosphere so that students do not have sufficient understanding of the learning material. If this is allowed, the potential of students will not be able to develop and as a result there are still many students who do not reach the Minimum Mastery Criteria (KKM).

Based on observations that have been made at SMA Negeri 1 Pegajahan that the low student learning outcomes are evidenced by the fact that there are still many students who have not achieved the Minimum Completeness Criteria (KKM) that the school has set for economic subjects, which is 75.

According to Trianto (2015) The learning model is a plan or a pattern that is used as a reference in carrying out the learning process in the classroom or learning in tutorials. Therefore, the selection of using the right learning model is very important to influence the interaction patterns of students who are intertwined in the classroom with various skills that are owned to increase the success of student learning to be achieved. Several kinds of learning models are expected to be able to overcome problems in economic learning, including the Problem Based Learning learning model.

According to Darmadi (2017) problem-based learning is a learning approach that presents contextual problems so as to stimulate students to learn. Students are given the freedom to think more in developing their reasoning in solving the problems they face.

Based on the description above, the authors are interested in conducting a study entitled "The Effect of Problem Based Learning on Economic Learning Outcomes for Class X Students of SMA Negeri 1 Pegajahan in the 2021/2022 Academic Year"

2. Methodology

Types and Design of Research

This research is an experimental research method, which in its implementation uses two different classes. then compare between the experimental class and the control class (Sugiyono, 2013).

Location and Time of Research

This research was conducted at SMA Negeri 1 Pegajahan which is located at Jl. Besar Bengabing Village, Kec. Pegajahan, Kab. Serdang Bedagai, North Sumatra. This research was conducted in the even semester of the 2021/2022 academic year

Population and Research Sample

The population in this study were all students of class X SMA Negeri 1 Pegajahan TA 2021/2022 with a total of 21O. And the sample in this study is class X 3 and X 4 with a total of 71 students. The sampling technique in this study used purposive sampling

Data Collection Techniques

Data collection techniques used in this study used test, non-test and documentation techniques

Research Instruments

Before this instrument was used as a data collection tool, for data analysis techniques in this study using the Microsoft Excel 2010 program. So the research instrument was first tested for validity using the validity test

Data Analysis Techniques

Before testing the hypothesis, the data analysis requirements were first tested, in this case the normality test and data homogeneity test were calculated. For data analysis techniques in this study using the SPSS 24.0 program

3. Results and Discussion

A. Research Instrument Test Learning Outcome Test

1. Validity Test

With the provision that if r arithmetic > r table is categorized as valid. Based on the results of the validity test of the learning outcomes of 25 multiple choice questions with levels C1 to C6 that have been tested with a value of r table = 0.3388, 20 items were declared valid and 5 items were declared invalid. The questions that were declared invalid were questions number 11.14, 17, 20, 23. While the questions that were classified as valid were 20 items. Based on these validation criteria, it can be concluded that there are 20 multiple choice items that can be used to measure the ability of students, namely questions number 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 12, 13 , 15, 16, 18, 19, 21, 22, 25, 26. The data were processed using the SPSS 24.0 program.

2. Reliability Test

Based on the reliable test that has been carried out on 20 multiple choice questions that are declared valid, the value is 0, 91219. Then the value is compared with r table = 0.3388. So it can be concluded that r arithmetic 0.91219 > r table 0.3388, meaning that the items have been declared reliable and can be

used for research. Calculation of reliability test with the help of Microsoft excel 2010 program

3. Distinguishing Power of Questions

Based on the calculation of the discriminating power of valid items, there are only two criteria, namely sufficient and good. There are 2 items that are classified as sufficient which are in the range (D: 0.21 - 0.40), namely questions number 15 and 24. Then there are 118 items that are classified as good which are in the range (D: 0.41 - 0, 70) namely questions number 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 25. The questions are valid questions and each has sufficient and good distinguishing power and none is in the bad category, so it can be concluded that all valid questions can be used as instruments to measure the ability of students.

4. Difficulty level of questions

Based on the results of the calculation of the difficulty level of 20 valid multiple choice questions, it shows that there are 2 items that are included in the easy difficulty level (P 0.70 - 1.00), namely questions number 1 and 18. There are 16 questions that are classified as moderate. (P 0.31 – 0.70), namely questions number 2, 3, 4,5,6, 8, 9, 10, 11, 12, 13, 14, 16, 17, 19, 20, 21, 22, 25. And there are 2 questions that are classified as difficult (P 0.00 < 0.30), namely items number 7 and 15, so it can be concluded that from the results of the calculation of the level of difficulty, these questions have different levels of difficulty, namely: easy , moderate and difficult.

B. Research Prerequisite Testing

1. Normality Test

Normality test of the data was carried out using the Kolmogorov Smirnov to determine whether the distribution of the tested data came from a normally distributed population or not. This normality test uses the SPSS 24.0 program with a significant level of 0.05. The values obtained for the post-test experimental class obtained a significance of 0.200> 0.05, it can be concluded that the research data is normally distributed. Likewise, the post test for the control class was concluded below the significance value, namely 0.071 > 0.05, so it can be concluded that the research data is normally distributed

2. Homogeneity Test

Homogeneity test in this study uses Levene's which aims to determine whether the variances of the total population are the same or not. The homogeneity test in this study used the SPSS 24.0 program with a significant level of 0.05. The results of the homogeneity test of the learning outcomes test are 0.293 significant level (α = 0.05), it can be concluded that the learning outcomes test has a homogeneous variant

3. Hypothesis Testing

Based on the table above, the t arithmetic 2,936 > t table 1,667 at the level of 0.05 with a sig value. (2-tailed) = 0.005 with a significant level of 5% (0.05). So 0.005 < 0.05 then Ho is accepted and Ha is rejected. According to the basis of decision making based on significance, it can be concluded that there is a positive influence on the problem based learning (PBL) Regarding the learning outcomes

of economic students of class X SMA Negeri 1 Pegajahan for the 2021/2022 academic year.

Discussion

This study aims to determine the effect of Problem Based Learning Learning Model on economic learning outcomes of class X students of SMA Negeri 1 Pegajahan. The number of students in this research sample was 71 students with details of 36 in class X-4 and 35 in class X-3, the sampling technique used purposive sampling with the results of class X-3 as the control class and class X-4 as the experimental class. To get 20 valid questions the author uses a test class in class XI IPS 1 at SMA Negeri 1 Pegajahn with a total of 34 students. Based on the analysis, the results showed that the learning outcomes of students who were treated with the PBL learning model were higher with an average gain (80.00) and standard deviation (10.89) with a total of 36 respondents, than students who were treated with the conventional model with an average average (73.00) and standard deviation (9.09) with 35 respondents. And the acquisition of a significance value of 0.005 <0.05, so that statistically it can be concluded that Ho is rejected and H1 is accepted.

Learning using the problem based learning model creates activities that stimulate students' curiosity, namely by providing problems related to students' daily lives, group work, making works and presenting with these activities making the problem based learning preferred by students so that students are more enthusiastic in following the process. learning. Students are interested in the activities carried out during the learning process, with the problems given by the teacher making students challenged to solve these problems. students and their groups try their best to solve the problems given by the teacher because they want to successfully solve the problem. When the teacher gives an opportunity for the group presentation to present the results of the investigation in front of the class. Through this problem-based learning , it can develop students' ability to think critically, and provide opportunities for students to apply their knowledge to the real world.

In the control class using the conventional model, this learning is carried out using the lecture method, question and answer, and assignments, students are asked to listen to the teacher's explanation, after that students record what the teacher says, after the teacher explains the material, the teacher gives students questions about financial services institutions only a few students who wants to answer. After that, students were asked to work on practice questions related to the material that had been given. some students do not seem to be doing the assignments given by the teacher and look busy with friends, some are playing.

It means that classes that use Problem Based Learning (PBL) models and conventional learning models are equally good in the learning process. It's just that conventional learning is a teacher-centered learning model, so students become passive and only listen to explanations from the teacher and all members of students must learn at the pace of the teacher, students only receive, record and memorize the subject matter given by the teacher. Meanwhile, the problem based learning is expected to be able to help students to have an open, reflective, critical, and active learning mindset, as well as to facilitate success in problem solving, communication, group work, and better interpersonal skills.

From the explanation above, it can be seen that the problem-based learning has a better effect on developing learning outcomes on material for financial service institutions compared to the conventional model. Learning in the experimental class with the problem based learning is more fun because in learning there is group work, investigation, making works and displaying them. While in the control class with the conventional model, students play less role in learning, learning is more dominated by the teacher. Differences in student learning outcomes in economics appear because of the different treatment between the control class and the experimental class.

One of the obstacles faced by researchers in this study is the lack of time allocation using problem based learning. From the practice of implementing the problem based learning , it is indeed difficult to bring the world of students into our world and deliver our world to theirs. However, if all the existing factors achieve maximum learning objectives with optimal results.

The results of this study are in line with research conducted by Amalia and Hardini (2020) with research results showing that online social studies subject-based learning using a problem-based learning has an influence on the learning outcomes of fifth grade elementary school students. Research conducted by Sulistyani (2014) stated that the application of the problem based learning can improve learning outcomes in the material of economic problems for students of class X IIS 5 SMA Negeri 1 Juwana. Another research conducted by Prianto (2015) regarding the role of the PBL model is considered successful in improving student learning outcomes.

This is in line with research conducted by Yance (2013), namely that student learning outcomes increase after the application of the PBL learning model. The problem based learning has a positive effect on students' cognitive learning outcomes . For this reason, the Problem Based Learning able to influence learning outcomes for students so that this model can be used by teachers in learning activities to create a new learning atmosphere.

4. Conclusion

Based on the data obtained from the analysis of the effect of the problem based learning on the economics learning outcomes of class X students of SMA Negeri 1 Pegajahan, conclusions can be drawn. There is a positive and significant influence from the use of problem based learning on economic learning outcomes for class X students. It can be seen from the results of the calculation of the hypothesis test that t arithmetic > t table is 2,936 > 1.667 and a significance value (2-tailed) (0.005 < 0 ,05). This means that the hypothesis is accepted, so there is a positive and significant influence from the use of the problem based learning on the economic learning outcomes of class X students at SMA Negeri 1 Pegajahan for the 2021/2022 academic year.

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