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THE EFFECT OF THE DISCOVERY LEARNING MODEL ON STUDENTS' LEARNING ACTIVITY IN ECONOMICS SUBJECTS AT SMA NEGERI 10 PALEMBANG

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ABSTRACT

This study aims to prove the influence of *the discovery learning* model on the learning activity of students in economics subjects at SMA Negeri 10 Palembang. Quantitative research method of experimental type with *research design Pre- Experimental Design One Group Pretest-Posttest*. The population in this study is class X of SMA Negeri 10 Palembang even semester for the 2024/2025 academic year which studies economics subjects with a class X.6 research sample of 35 students using cluster sampling techniques. The data collection techniques used were questionnaires and observations. The questionnaire was used to obtain data on learning activity and observation data was obtained from the results of observation during learning with *the discovery learning model*. The hypothesis test was carried out using a paired sample t test showing a count of 4.941 ≥ a table of 1.691 which means that H0 is rejected and Ha is accepted so that there is an influence *of the discovery learning* model on the learning activity of students in economics subjects at SMA Negeri 10 Palembang. Educators are advised to optimize the *Discovery learning model* by ensuring that students follow each step appropriately and in a structured manner. Educators also need to pay attention to indicators of learning activity so that learning goals are achieved and students are actively involved in discussions and learning processes.
Keywords: *discovery learning*, activeness of learning

INTRODUCTION

The learning process that focuses on teachers as the only source of knowledge now needs to undergo changes. Currently, learning must be more focused on students, with teachers playing the role of facilitators. To improve the quality of learning, teachers need to create an environment that supports active and creative learning. Learner-focused learning requires them to be actively involved in the learning process. This activeness is a very important factor for the success of learning. According to Sele (2023:8-9), students as the main party in the learning process have the responsibility to actively participate. The form of student activity in learning can vary. This activeness can be seen in the form of physical and psychological activities.

Furthermore, according to Arbainah (2023), active learning refers to actions or elements carried out by students related to their influence in the learning process in the classroom. This means that the learning activity of students can be seen at every stage of learning activities, both in discussion activities, listening to explanations, solving problems, doing active assignments, compiling reports, and presenting report results. The low learning activity of students can be caused by the lack of implementation of a learning model that involves the active participation of students and learning is still centered on teachers. Therefore, to overcome this, it is necessary to choose the right learning model so that learning goals are achieved. Based on the results of initial observations and interviews that have been conducted with economics subject educators at SMA Negeri 10 Palembang on September 30, 2024, it is known that the frequently used learning model is *the project-based learning* model. However, during the learning process, students are less active because there are still many who do not pay attention to the educator's explanations, rarely ask educators or friends about

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unclear material, lack confidence in expressing opinions, often play alone during learning, and lack enthusiasm in the learning process which causes the learning process to be less than optimal. Therefore, to overcome this, it is necessary to choose a more appropriate learning model so that the learning process becomes more optimal and the learning goals are achieved. One of them is by applying *the Discovery learning model. Discovery learning* is a learning process in which students are not directly given the final learning results, but they are expected to find these results themselves through stimuli in the form of questions that guide them Iwantoro et al. (2022).

According to Syarifah (2022:13), the *Discovery learning* model is a learning approach that allows students to be actively involved in the learning process, so that they can utilize their thinking process to find the concepts or theories being studied. Furthermore, according to Nababan et al. (2023), *Discovery learning* is a learning strategy that requires students to organize and find certain concepts in a problem. In the application of this strategy, students are required to be more active in learning to find answers to problems given by teachers, while being encouraged to conduct experiments that allow them to discover principles independently. In other words, *the Discovery learning* strategy focuses on students who seek to find, investigate, and process new knowledge concepts to solve problems, so that students can develop their potential both in knowledge and skills.

The steps of the *discovery learning* model are *Stimulation*, *Problem Statement*, *Data Collection*, *Data Processing*, *Verification*, and *Generalization*. Based on the above research problems, this study aims to prove the influence of *the Discovery learning* model on the learning activity of students in Economics Subject Class X at SMA Negeri 10 Palembang. From this research, it is hoped that it can help students in encouraging and increasing learning activity through the use of *the Discovery learning model.*

RESEARCH METHODS

The type of research used in this study is an experimental type of research with a quantitative approach. The researcher uses quantitative research because the data processing in this study is in the form of numbers/numerical. And this researcher applies the *Pre-Experimental Design* experimental model by applying *One Group Pretest-Posttest Design.* In this study, there is a population, namely class X students at SMA Negeri 10 Palembang for the 2024/2025 academic year.The sampling technique for this study uses *cluster sampling* techniques and was obtained in class X 6 SMA Negeri 10 Palembang with a total of 35 students.

This research instrument uses observation and questionnaires. Where in this study, Observation uses a likert scale of 1-5 to assess the syntax of the application of *the discovery learning model* carried out by the researcher and in the Questionnaire instrument uses a likert scale of 1-4 to measure the influence *of the discovery learning model* on the learning activity of students. Before the questionnaire instrument is given to respondents, it is necessary to evaluate it first by the validator to ensure its feasibility. In this validation process, the researcher was guided by Mrs. Dewi Pratita, S.Pd., M.Pd. as an expert validator, who provided an assessment of the questionnaire instruments, observation sheets, and teaching modules that would be used in the research. After the revision was carried out in accordance with the validator's input, the instrument was declared feasible with the following assessment results: the questionnaire obtained a score of 86%, the learning observation sheet 85%, the observation of learning activity 85%, and the teaching module 87%. Based on these

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results, all instruments were declared suitable for use in the research. Furthermore, the questionnaire can be tested on non-sample students.

After the validation test was carried out, a reliability test was carried out. The results of the reliability calculation were obtained as 0.938 while 0.70, it can be concluded that the questionnaire instrument is categorized as reliable with a very strong relationship level and the questionnaire can be used in the research. The research data analysis technique begins with analyzing observation data and questionnaires. Followed by a prerequisite test, namely a normality test using Chi Square, then a hypothesis test using $r_{hitung} r_{tabel}$ *a paired sample t-test* to prove the influence of the *discovery learning* model on students' learning activity in economics subjects at SMA Negeri 10 Palembang.

RESULTS OF RESEARCH AND TRANSLATION

Based on the results of research that has been carried out on 35 students of class X.6 in economics subjects with Financial Services Institution material, the results of observation data on the implementation *of the discovery learning* model carried out by economics subject educators were obtained at the first meeting, which was a percentage of 80.95%, where the implementation of digital literacy in this case was categorized as good. Furthermore, based on the data from the observation results of the second meeting, a percentage of 89.52% was obtained, which compared to the first meeting increased by 8.57% so it was categorized as very good. And based on the data from the observation results of the third meeting, a percentage of 96.19% was obtained, which compared to the second meeting increased by 6.67% so it was categorized as very good.

Table 1. Results of observation of the implementation of the *discovery learning model*

Meeting	Percentage	Category
First	80,95%	Good
Second	89,52%	Excellent
Third	96,19%	Excellent
Rata – Rata	**88,89%**	**Excellent**

Source: Researcher data, processed June 2025.

From the calculation of the results of observation data during the three meetings, the average was classified as very good, which was 88.89%. It can be concluded that the learning process with the *discovery learning model* treatment in class X.6 was carried out very well. Furthermore, the data from the observation of students' learning activity was carried out directly by the researcher. Based on the data from the observation results of the first meeting, an average percentage of 76.67% was obtained, so that the activeness of students is still categorized as good. Based on the data from the observation results of the second meeting, an average percentage of 87.92% was obtained, which compared to the first meeting increased by 11.25% so that the learning activity of students was categorized as very good. Based on the data from the observation results of the third meeting, a percentage of 96.25% was obtained, which compared to the second meeting increased by 8.33% so that the learning activity of students was categorized as very good.

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Table 2. Results of Learning Activity Observation

Meeting	Percentage	Category
First	76,67%	Good
Second	88,33%	Excellent
Third	96,67%	Excellent
Rata – Rata	**86,95%**	**Excellent**

Source: Researcher data, processed June 2025.

From the calculation of the results of observation data during the three meetings, the average was obtained which was categorized as very good, which was 86.95%. It can be concluded that the learning process with the *discovery learning* model in class X.6 has improved very well. Furthermore, the data from the *Pre-test* Questionnaire is given to students at the beginning of the meeting or before the learning treatment with the discovery learning *model*. The results of the questionnaire data analysis showed that the average score was 78.17% with the category "Adequate". Then after the treatment with the discovery learning *model*, *a Post-test questionnaire* was given to the students. The results of the questionnaire data analysis showed that the average score was 81.25% with the category "Good".

Based on the results of the analysis of *pre-test* and *post-test* questionnaire data, the learning activity of students has increased, which previously averaged only 78.17%, increasing to 81.25%. This increase proves that there is an influence when economic learning uses the discovery learning *model*. To see the comparison of the average *pre-test* and *post-test* scores , you can see the following table:

Table 3. Comparison of *Pre-test* and *Post-test Averages*

Data	Smallest Score	Largest Score	Average Score	Category
Pre-test	60,42%	95,83%	78,17%	Good
Post-test	62,5%	100%	81,25%	Good

Source: Researcher data, processed June 2025.

Then before the hypothesis test is carried out using *the paired sample t test*, the normality test is first carried out using the chi squared formula, because the conditions for conducting the hypothesis test are that *the pre-test* and *post-test questionnaire data* must be distributed normally. The following is a table of normality test results:

Table 4. Normality Test Results

Questionnaire	Calculation	Table	Category
Pre-test	20,7864	48,60237	Usual
Post-test	163338	48,60237	Usual

Source: Researcher data, processed June 2025.

Based on the table above, it can be seen that *the pre-test* and *Post-test* questionnaires have a value smaller than the r table so that the data of the two questionnaires is distributed normally. So that the data is eligible for a hypothesis test using *the paired sample t test*. Based on the calculation of

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the paired sample t-test, a t-test value was obtained = 3.622 with the provision (df = n-1) df = 35 – 1 with a significance level of 0.05, then the ttable value = 1.691 was obtained, meaning tcount = 4.941 ≥ ttable = 1.691, meaning Ho was rejected and Ha was accepted, so it can be concluded that there is an influence of the *discovery learning* model on students' learning activity in economics subjects at SMA Negeri 10 Palembang

CONCLUSION

Based on the results of the research and discussions conducted by the researcher, it was stated that there was an influence of the *discovery learning* model on the learning activity of students in economics subjects at SMA Negeri 10 Palembang. The results of the hypothesis test used *a paired sample t-test* which Ho rejected and Ha accepted so that it can be concluded that there is an influence of the *discovery learning* model on the learning activity of students in economics subjects at SMA Negeri 10 Palembang. The results of this study are also supported by the average percentage of active learning questionnaires before the *discovery learning model* was applied, which was 78.17% and after *the discovery learning model* was applied, with an average percentage increasing to 81.25%. Based on the results of the study, the researcher suggests that educators optimize the application of *the Discovery learning model* by ensuring that each step is carried out appropriately and in a structured manner. Educators also need to pay attention to indicators of learning activity so that learning goals are achieved and students are actively involved in the entire learning process.

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