

## ABSTRAK

Skripsi dengan Judul “Pengaruh Model Pembelajaran *Discovery Learning* Terhadap Pemahaman Konsep dan Hasil Belajar Fisika Kelas X Pada Materi Usaha (kerja) Dan Energi di MAS Al Fattahiyyah Tulungagung” ditulis oleh Frisca Karisma Wati, NIM. 12211103087, Prodi Tadris Fisika, Fakultas Tarbiyah dan Ilmu Keguruan, Universitas Islam Negeri Sayyid Ali Rahmatullah Tulungagung, pembimbing Muhammad Luqman Hakim Abbas, S.Si., M.Pd.

**Kata kunci:** *Discovery Learning*, Pemahaman Konsep dan Hasil Belajar Fisika Siwa.

Penelitian dilakukan di MAS Al Fattahiyyah Tulungagung dengan latar belakang rendahnya pemahaman konsep dan hasil belajar siswa, khususnya pada bab Usaha (kerja) dan Energi. Model pembelajaran yang digunakan guru dalam proses pembelajaran kurang bervariasi masih menggunakan model pembelajaran konvensional. Model pembelajaran konvensional membuat siswa kurang aktif. Oleh sebab itu, peneliti menerapkan model pembelajaran *discovery learning*. Model pembelajaran *discovery learning* adalah model pembelajaran dimana guru memberikan kebebasan kepada siswa untuk menemukan sesuatu untuk dirinya sendiri, karena dengan menemukan sendiri memungkinkan siswa untuk memahami lebih dalam.

Tujuan penelitian (1) mengetahui adanya pengaruh model pembelajaran *discovery learning* terhadap pemahaman konsep fisika kelas X pada materi usaha (kerja) dan energi di MAS Al Fattahiyyah Tulungagung. (2) mengetahui adanya pengaruh model pembelajaran *discovery learning* terhadap hasil belajar fisika kelas X pada materi usaha (kerja) dan energi di MAS Al Fattahiyyah Tulungagung. Dan (3) mengetahui adanya pengaruh model pembelajaran *discovery learning* terhadap pemahaman konsep dan hasil belajar fisika kelas X pada materi usaha (kerja) dan energi di MAS Al Fattahiyyah Tulungagung.

Penelitian ini menggunakan pendekatan kuantitatif. Jenis penelitian eksperimen semu (*quasi eksperiment*). Desain *nonequivalent control group design* dengan penerapan *pre-test* dan *post-test*. Populasi penelitian seluruh siswa kelas X MAS Al Fattahiyyah Tulungagung, total 174. Sampel diambil dengan teknik *Sampling Purposive*. Kelas X IPA A kelas eksperimen dan X IPA B kelas kontrol. Kelas X IPA A sebanyak 28 siswa diperlakukan model *discovery learning*. Sedangkan, kelas X IPA B sebanyak 28 siswa menggunakan model konvensional. Setiap kelas diberi *pre-test* dan *post-test* yang sama. Teknik pengumpulan data berupa tes dan dokumentasi. Teknik analisis data menggunakan *uji Independent Samples T-Test* dan uji MANOVA (*Multivariate Analysis of Variance*).

Hasil penelitian (1) hasil *uji Independent Sample T-Test*, dengan nilai *Sig. (2-tailed)*  $0,000 < 0,05$ . Maka  $H_0$  ditolak dan  $H_a$  diterima. Sehingga terdapat pengaruh model pembelajaran *discovery learning* terhadap pemahaman konsep siswa pada materi Usaha (kerja) dan Energi di MAS Al Fattahiyyah Tulungagung. (2) Hasil *uji Independent Sample T-Test*, dengan nilai *Sig. (2-tailed)*  $0,000 < 0,05$ . Maka  $H_0$  ditolak dan  $H_a$  diterima. Sehingga terdapat pengaruh model pembelajaran *discovery learning* terhadap hasil belajar siswa pada materi Usaha (kerja) dan Energi di MAS Al Fattahiyyah Tulungagung. (3) Hasil *uji MANOVA*, dengan nilai *Sig.*  $0,000 < 0,05$ . Maka  $H_0$  ditolak dan  $H_a$  diterima. Sehingga terdapat pengaruh

model pembelajaran *discovery learning* terhadap pemahaman konsep dan hasil belajar siswa pada materi Usaha (kerja) dan Energi di MAS Al Fattahiyah Tulungagung.

## ABSTRACT

Thesis with the title "The Influence of the Discovery Learning Learning Model on Understanding Concepts and Physics Learning Outcomes in Class X on Business (work) and Energy Materials at MAS Al Fattahiyyah Tulungagung" was written by Frisca Karisma Wati, NIM. 12211103087, Tadris Physics Study Program, Faculty of Tarbiyah and Teacher Training, Sayyid Ali Rahmatullah State Islamic University Tulungagung, supervisor Muhammad Luqman Hakim Abbas, S.Sc., M.Pd.

**Keywords:** *Discovery Learning*, Understanding of Shiva's Physics Learning Concepts and Outcomes.

The research was conducted at MAS Al Fattahiyyah Tulungagung with a background of low understanding of concepts and student learning outcomes, especially in the chapters on Business (work) and Energy. The learning model used by the teacher in the learning process is less varied, still using conventional learning models. Conventional learning models make students less active. Therefore, researchers apply the learning model of discovery learning. The discovery learning learning model is a learning model in which the teacher gives freedom to students to find something for themselves, because finding it yourself allows students to understand more deeply.

The research objectives (1) determine the effect of the discovery learning model on the understanding of physics concepts in class X on the subject matter of work (work) and energy at MAS Al Fattahiyyah Tulungagung. (2) to determine the effect of the discovery learning model on the physics learning outcomes of class X on the subject matter of effort (work) and energy at MAS Al Fattahiyyah Tulungagung. And (3) knowing the effect of the discovery learning learning model on the understanding of concepts and physics learning outcomes of class X on the subject matter of work (work) and energy at MAS Al Fattahiyyah Tulungagung.

This study uses a quantitative approach. This type of quasi-experimental research (quasi experiment). Nonequivalent control group design with the application of pre-test and post-test. The research population was all students of class X MAS Al Fattahiyyah Tulungagung, a total of 174. Samples were taken using purposive sampling technique. Class X IPA A is the experimental class and X IPA B is the control class. Class X IPA A as many as 28 students are treated with the discovery learning model. Meanwhile, class X IPA B as many as 28 students using the conventional model. Each class was given the same pre-test and post-test. Data collection techniques in the form of tests and documentation. Data analysis techniques used the Independent Samples T-Test and the MANOVA (Multivariate Analysis of Variance) test.

The results of the research (1) the results of the Independent Sample T-Test, with a Sig. (2-tailed)  $0.000 < 0.05$ . Then  $H_0$  is rejected and  $H_a$  is accepted. So that there is an influence of the discovery learning learning model on students' understanding of the concept of Business (work) and Energy at MAS Al Fattahiyyah Tulungagung. (2) The results of the Independent Sample T-Test, with a value of Sig. (2-tailed)  $0.000 < 0.05$ . Then  $H_0$  is rejected and  $H_a$  is accepted. So that there is an influence of the discovery learning learning model on student learning outcomes on the subject of Business (work) and Energy at MAS Al Fattahiyyah Tulungagung.

(3) MANOVA test results, with Sig.  $0.000 < 0.05$ . Then  $H_0$  is rejected and  $H_a$  is accepted. So that there is an influence of the discovery learning learning model on understanding concepts and student learning outcomes on the subject of Business (work) and Energy at MAS Al Fattahiyah Tulungagung.

