

Achmad, A. 2022. *Penerapan Model Pembelajaran Discovery Learning Berbantuan Media PhET Terhadap Keterampilan Proses Sains Siswa*. Skripsi, Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Dosen Pembimbing: Mochammad Ahied.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *discovery learning* berbantuan media *PhET* terhadap keterampilan proses sains. Jenis penelitian yang digunakan *posttest only control group design*. Penelitian dilaksanakan di MTs At-Tahririyah Modung dengan Populasi seluruh siswa kelas VIII. Sampel Penelitian dipilih dengan teknik *purposive sampling* yaitu kelas VIII-B dan VIII-C. Pengumpulan data dilakukan dengan tes yaitu tes keterampilan proses sains dan angket respons siswa. Teknik analisis data menggunakan uji *Mann-Whitney U*. Berdasarkan hasil penelitian dapat disimpulkan bahwa: (1) terdapat pengaruh model pembelajaran *discovery learning* berbantuan *PhET* terhadap keterampilan proses sains siswa (2) rata-rata keterampilan proses sains siswa kelas kontrol sebesar 52% dengan kategori cukup baik sedangkan kelas eksperimen diperoleh nilai rata-rata sebesar 75% dengan kategori baik (3) Keterlaksanaan pembelajaran *discovery learning* pada kelas eksperimen diperoleh nilai rata-rata sebesar 96% dengan kriteria sangat baik (4) Respons siswa terhadap pembelajaran *discovery learning* diperoleh rata-rata pernyataan positif sebesar 65% pada kategori sangat setuju sedangkan untuk pernyataan negatif yaitu 45% pada kategori tidak setuju dan sangat tidak setuju.

Kata kunci: Media *PhET*, Model *discovery learning*, Keterampilan proses sains

Achmad, A. 2022. *Application of PhET Media Assisted Discovery Learning Model on students' Science Process Skills*. Thesis, Science Education Study Program, Faculty of Education, University of Trunojoyo Madura. Advisor: Mochammad Ahied.

ABSTRACT

This study aims to determine the effect of the PhET assisted discovery learning model on science process skills. This type of research used posttest only control group design. The research was conducted at MTs At-Tahririyah Modung with a population of all eighth-grade students. The research sample was selected by purposive sampling technique, namely class VIII-B and VIII C. Data was collected by means of tests, namely tests of science process skills and student response questionnaires. The data analysis technique used the Mann-whitney U test. Based on the results of the study, it can be concluded that: (1) there is an influence of PhET assisted discovery learning model on students' science process skills (2) the average science process skills of control class students is 52% with a fairly good category while the experimental class obtained an average value of 75% with a good category (3) the implementation of discovery learning in the experimental class obtained an average value of 96% with the criteria very good (4) student responses to discovery learning obtained an average of 65% positive statements in the strongly agree category while for negative statements, namely 45% in the disagree and strongly disagree categories.

Keyword: PhET media, Discovery learning model, Science process skills