

Aditya Dwi Mahardika. 2025. Pengaruh Model *Creative Problem Solving* berbantuan *PHeT* terhadap Pemahaman Konsep Siswa pada Materi Getaran, Getaran dan Cahaya. Skripsi, Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura.
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ABSTRAK

Tujuan penelitian ini yaitu untuk mengetahui perbedaan kemampuan pemahaman konsep siswa pada kelas kontrol dan eksperimen, peningkatan kemampuan pemahaman konsep siswa pada kelas eksperimen, keterlaksanaan pembelajaran model *Creative Problem Solving* berbantuan *PHeT*, dan repons siswa. Penelitian ini dilakukan di UPTD SMPN 2 Klampis. Jenis penelitian ini kuantitatif kuasi eksperimen dengan desain *nonequivalent control group*. Subjek yang digunakan yaitu siswa kelas VIII yang menempuh mata Pelajaran IPA menggunakan *random sampling*. Teknik pengumpulan data menggunakan tes pemahaman konsep, lembar observasi keterlaksanaan, angket respon siswa, dan dokumentasi. Analisis data menggunakan uji T sampel bebas, N-Gain, persentase keterlaksanaan, dan persentase respons siswa. Hasil penelitian ini yaitu: 1) terjadi perbedaan pemahaman konsep siswa antara kelas kontrol dan kelas eksperimen pada materi getaran, gelombang dan cahaya dengan skor $\alpha = 0,000$, 2) terdapat peningkatan pemahaman konsep siswa di kelas eksperimen dengan skor N-Gain 0,56 kategori sedang, 3) keterlaksanaan pembelajaran di kelas eksperimen sebesar 88,86% kategori sangat tinggi, 4) respons siswa memperoleh skor 69,9% kategori positif. Simpulan penelitian ini adalah model *creative problem solving* berbantuan *phet* berpengaruh signifikan terhadap pemahaman konsep siswa pada materi getaran, getaran dan Cahaya.

Kata kunci: *creative problem solving*, getaran, gelombang dan cahaya, pemahaman konsep siswa, simulasi *PHeT*

Aditya Dwi Mahardika. 2025. *The Effect of the PHeT-Assisted Creative Problem Solving Model on Students' Conceptual Understanding of Vibration, Waves, and Light*. Thesis, Science Education Study Program, Faculty of Education, Universitas Trunojoyo Madura. Advisor: Moch. Yasir.

ABSTRACT

The purpose of this study was to determine the differences in students' conceptual understanding abilities in the control and experimental classes, the improvement of students' conceptual understanding abilities in the experimental class, the implementation of the Creative Problem Solving learning model assisted by PHeT, and student responses. This study was conducted at the UPTD of SMPN 2 Klampis. This type of research is a quantitative quasi-experimental study with a nonequivalent control group design. The subjects used were eighth grade students who took Science subjects using random sampling. Data collection techniques used conceptual understanding tests, implementation observation sheets, student response questionnaires, and documentation. Data analysis used independent sample T tests, N-Gain, percentage of implementation, and percentage of student responses. The results of this study are: 1) there is a difference in students' conceptual understanding between the control and experimental classes on the material of vibration, waves and light with a score of $\alpha = 0.000$, 2) there is an increase in students' conceptual understanding in the experimental class with an N-Gain score of 0.56 in the medium category, 3) the implementation of learning in the experimental class is 88.86% in the very high category, 4) students' responses get a score of 69.9% in the positive category. The conclusion of this study is that the creative problem solving model assisted by PET has a significant influence on students' conceptual understanding of the material on vibration, vibration and light.

Keywords: *creative problem solving, vibration, waves, and light, students' conceptual understanding, phet simulation.*