

Istiana. 2025. Reduksi Miskonsepsi Siswa pada Materi Getaran, Gelombang, dan Cahaya Menggunakan Model *Conceptual Change*. Skripsi, Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing: Ana Yuniasti Retno Wulandari.

ABSTRAK

Penelitian ini dilakukan untuk mereduksi miskonsepsi siswa pada materi getaran, gelombang, dan cahaya menggunakan model *conceptual change*. Tujuan penelitian yaitu mengetahui persentase tingkat miskonsepsi sebelum dan sesudah penerapan model *conceptual change*, mengetahui pengaruh model *conceptual change* dalam mereduksi miskonsepsi siswa, mengetahui keterlaksanaan pembelajaran menggunakan model *conceptual change*, mengetahui respons siswa terhadap penerapan model *conceptual change*. Jenis penelitian menggunakan metode kuantitatif dengan desain penelitian *pre-experimental* bentuk *One-Group Pretest-Posttest Design*. Sampel penelitian yaitu siswa VIII D sebanyak 30 siswa dengan teknik pengambilan sampel menggunakan *purposive sampling*. Penelitian dilaksanakan di SMPN 1 Tragah pada semester genap tahun pelajaran 2024/2025. Teknik pengumpulan data menggunakan tes, angket, observasi dan dokumentasi. Hasil penelitian dapat disimpulkan bahwa: (1) Persentase miskonsepsi siswa sebelum dan sesudah pembelajaran menggunakan model *conceptual change* terdapat penurunan yaitu 46,43% sebelum pembelajaran dan 18,57% sesudah pembelajaran. (2) Terdapat pengaruh model *conceptual change* dalam mereduksi miskonsepsi dari hasil uji hipotesis menggunakan uji non parametrik *Wilcoxon* memperoleh nilai *Asymp. Sig* sebesar 0,000, dimana nilai $0,000 < 0,05$ artinya H_1 diterima. (3) Keterlaksanaan pembelajaran dengan model pembelajaran *conceptual change* memperoleh nilai rata-rata sebesar 100% dengan kriteria sangat baik. (4) Respons siswa terhadap pembelajaran setelah diterapkan model pembelajaran *conceptual change* memperoleh rata-rata persentase 86,03% dengan kriteria sangat baik.

Kata Kunci: getaran gelombang dan cahaya, miskonsepsi, model *conceptual change*, tes diagnostik *five-tier*.

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ABSTRACT

This research was conducted to reduce students' misconceptions about vibration, wave, and light materials by using the conceptual change model. The research objectives were to determine the percentage of misconception level before and after the application of the conceptual change model, to determine the effect of the conceptual change model in reducing student misconceptions, to determine the implementation of learning using the conceptual change model, to determine student responses to the application of the conceptual change model. This type of research uses quantitative methods with a pre-experimental research design in the form of One-Group Pretest-Posttest Design. The research sample was VIII D students as many as 30 students with the sampling technique using purposive sampling. The research was conducted at SMPN 1 Tragah in the even semester of the 2024/2025 academic year. Data collection techniques using tests, questionnaires, observation, and documentation. The results of the study can be concluded that: (1) The percentage of student misconceptions before and after learning using the conceptual change model decreased, namely 46.43% before learning and 18.57% after learning. (2) There is an effect of the conceptual change model in reducing misconceptions from the results of hypothesis testing using the Wilcoxon non-parametric test obtained from Asymp. A sig value of 0.000, where the value of $0.000 < 0.05$ means that H_1 is accepted. (3) The implementation of learning with the conceptual change learning model obtained an average value of 100% with very good criteria.

Keywords: *wave vibration and light, misconceptions, conceptual change model, five-tier diagnostic test.*