

ABSTRAK

Moron, Hilaria Reda. 2018. **Peningkatan Pemahaman, Minat Belajar Dan Kejujuran Siswa Menggunakan Metode Eksperimen Terbimbing Berbantu *Mind Map* Pada Materi Getaran Harmonik di Kelas X IPA SMA N 1 Prambanan Yogyakarta**. Skripsi. Program Studi Pendidikan Fisika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma, Yogyakarta.

Penelitian ini bertujuan untuk mengetahui (1) Peningkatan pemahaman siswa pada materi getaran harmonik menggunakan metode eksperimen terbimbing berbantu *mind map*; (2) Perbedaan pemahaman siswa pada materi getaran harmonik antara yang belajar dengan pembelajaran menggunakan metode eksperimen terbimbing berbantu *mind map* dan metode ceramah aktif; (3) Peningkatan minat belajar fisika siswa pada materi getaran harmonik menggunakan metode eksperimen terbimbing berbantu *mind map*; (4) Tingkat kejujuran siswa dengan menggunakan metode eksperimen terbimbing berbantu *mind map* pada materi getaran harmonik.

Jenis penelitian ini adalah eksperimen kuantitatif. Subjek penelitian berjumlah 24 siswa dari kelas X IPA 2 sebagai kelas kontrol dan 24 siswa dari X IPA 3 sebagai kelas eksperimen. Metode pembelajaran untuk kelas eksperimen menggunakan metode eksperimen terbimbing berbantu *mind map* dan kelas kontrol dengan metode ceramah aktif. Instrumen yang digunakan untuk pengambilan data yaitu: *test* tertulis (*pretest* dan *posttest*), kuesioner minat belajar fisika, dan kuesioner kejujuran untuk kelas eksperimen. Peningkatan pemahaman konsep siswa berdasarkan nilai *pretest* dan nilai *posttest* yang dianalisis secara statistik menggunakan program SPSS 20.0. Skor minat belajar fisika siswa juga dianalisis secara statistik menggunakan program SPSS 20.0, dan skor kejujuran dikategorisasikan dengan bantuan program excel 2007.

Hasil penelitian menunjukkan bahwa (1) Metode eksperimen terbimbing berbantu *mind map* dapat meningkatkan pemahaman konsep pada materi getaran harmonik; (2) Pemahaman siswa berbeda berdasarkan *mean* namun secara statistik tidak berbeda dan berbeda berdasarkan jawaban siswa; (3) Tidak ada peningkatan minat belajar fisika siswa menggunakan metode eksperimen berbantu *mind map*; (3) Tingkat kejujuran kelas eksperimen pada materi getaran harmonik dikatakan jujur selama proses pembelajaran berlangsung.

Kata kunci: Peningkatan Pemahaman, Eksperimen Terbimbing, *Mind Map*, Ceramah Aktif, Minat Belajar fisika, Karakter Kejujuran, Getaran Harmonik.

ABSTRACT

*Moron, Hilaria Reda. 2018. **Increased Understanding, Interest in Learning, and Honesty of the Students Using the Guided Experiment Method Assisted by Mind Map on the Harmonic Vibration Material for Class X Science in SMA N 1 Prambanan Yogyakarta.** Undergraduate Thesis. Physics Education Study Program, Mathematics and Natural Sciences Education Department, Faculty of Teacher Training and Education, Sanata Dharma University, Yogyakarta.*

The aims of this study are to determine (1)The increased understanding of the students on the harmonic vibration material using guided experiment method assisted by mind map; (2) The different understanding of the students on the harmonic vibration material between those who learn using guided experiment method assisted by mind map and active lecture method; (3) The increased interest of the students in learning physics on the harmonic vibration material using guided experiment method assisted by mind map; and (4)The level of students' honesty using guided experiment method assisted by mind map on the harmonic vibration material.

This type of research is a quantitative experiment. The research subjects were 24 students from Class X Science 2 as the control class and 24 students from Class X Science 3 as the experimental class. The learning method for experimental class using guided experiment method assisted by mind map and control class with active lecture method. The instruments used for data retrieval were: written test (pre-test and post-test), physics learning interest questionnaire, and level of honesty questionnaire for the experimental class. The students increased understanding of concept based on the pre-test and post-test grades which were statistically analyzed by using the SPSS 20.0 program. The scores of students' physics learning interest were also statistically analyzed by using the SPSS 20.0 program, and the level of honesty scores were categorized by using the 2007 excel program.

The results of this research show that (1) The guided experiment method assisted by mind map can improve the concept understanding on the harmonic vibration material; (2) The students understanding is different based on mean but were not statistically different and differ based on student answers; (3) There is no increase in students' physics learning interest by using experiment method assisted by mind map; and (4) The students are honest during the learning process in experimental class on the harmonic vibration material.

Keywords: *Understanding Improvement, Guided Experiment, Mind Map, Active Lecture, Physics Learning Interest, Character of Honesty, Harmonic Vibration.*