

ABSTRAK

Adrianus Suada. 2010. *Peningkatan Pemahaman Siswa Pada Pokok Bahasan Hukum Ohm, Rangkaian Seri Paralel, dan Hambatan Kawat Melalui Metode Eksperimen Terbimbing*. Skripsi. Program Studi Pendidikan Fisika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan. Universitas Sanata Dharma. Yogyakarta.

Penelitian ini merupakan penelitian eksperimen kuantitatif. Penelitian ini bertujuan untuk mengetahui peningkatan pemahaman siswa mengenai konsep-konsep yang berhubungan dengan hukum Ohm, rangkaian seri paralel, dan hambatan kawat melalui metode eksperimen terbimbing. Untuk menentukan ada tidaknya peningkatan pemahaman siswa mengenai konsep hukum Ohm, rangkaian seri paralel, dan hambatan kawat, peneliti membandingkan pemahaman siswa sebelum dan sesudah pembelajaran dengan metode eksperimen terbimbing menggunakan LKS.

Penelitian ini dilakukan di Laboratorium Fisika Universitas Sanata Dharma Yogyakarta pada tanggal 15-16 April 2010. Partisipan penelitian adalah siswa-siswi kelas XI SMA Sang Timur.

Penelitian ini didesain mencakup empat tahap, yang terdiri dari peneliti membuat instrumen, siswa mengerjakan soal pretes, pembelajaran dengan metode eksperimen terbimbing menggunakan LKS, dan siswa mengerjakan soal postes. Tes berupa soal uraian berjumlah enam soal, mencakup konsep pokok yang berhubungan dengan hukum Ohm, rangkaian seri paralel, dan hambatan kawat.

Hasil penelitian menunjukkan bahwa secara keseluruhan terjadi peningkatan pemahaman siswa mengenai konsep hukum Ohm, rangkaian seri paralel, dan hambatan kawat.

ABSTRACT

Adrianus Suada. 2010. *The increasing of students' understanding in studying Ohm's Law, series parallel circuit, and wire resistance through guided experiment method.* Thesis. Physic Education Study Program, Department of Mathematics and Science Education, Faculty of Teacher's Training and Education. Sanata Dharma University, Yogyakarta.

This research was quantitative experiment research. This research aims to know the increasing of students' understanding about the concepts which are related with Ohm's Law, series parallel circuit, and wire resistance through guided experiment method. For knowing the increasing of students' understanding in Ohm's Law, series parallel circuit, and wire resistance, researcher compared the students' understanding before and after the study through guided experiment method by using student worksheet.

This research was done in Physics Laboratory of Sanata Dharma University on 15th until 16th April, 2010. The participants of this research were the students grade eleven of Sang Timur Senior High School.

This research was designed in four steps that consist of the researcher made the instrument, students answered the pretest, studying through guided experiment method with student worksheet, and students answered the posttest. The tests were viewed in six essay tests included main concept which was correlated with Ohm's Law, series parallel circuit, and wire resistance.

The result of this research showed the increasing of students' understanding about Ohm's Law concept, series parallel circuit, and wire resistance over all.