

IMPROVING STUDENTS' UNDERSTANDING AND MOTIVATION  
ON ELECTRICAL CIRCUIT TOPIC THROUGH  
MULTIPLE INTELLIGENCE BASED LEARNING

RESEARCH PROPOSAL

Submitted as Requirement to Obtain Degree of *Sarjana Pendidikan* in  
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INTERNATIONAL PROGRAM ON SCIENCE EDUCATION  
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UNIVERSITAS PENDIDIKAN INDONESIA

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**Oleh:**

**Siti Kalimaya**

Skripsi yang diajukan untuk memenuhi salah satu syarat memperoleh gelar Sarjana pendidikan pada Fakultas pendidikan Matematika dan Ilmu Pengetahuan Alam

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**APPROVAL FORM OF RESEARCH PAPER  
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MULTIPLE INTELLIGENCE BASED LEARNING**

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**ABSTRACT**

The research aims to identify the effect of implementing multiple intelligence based learning to improve students' understanding and motivation on electrical circuit topic. Totally 66 of 8<sup>th</sup> grade junior high school students were selected through convenience sampling technique as experimental group subjects of this research. The experimental group divided into two categories as higher and lower achiever class based on school privacy. The experimental group was instructed to learn through multiple intelligence based learning as the treatment in learning electrical circuit topic. The treatment given lasted for 6 meetings in 6 weeks and conducted using one group pre-test and post-test design. To see the effect of the treatment on students' understanding, an achievement test about electrical circuit topic which consisted of 24 items was distributed and analyzed using SPSS. The result showed that normalized gain value of the whole participants was 0.28 which categorized as a low improvement. In other word, students' understanding on electrical circuit topic improved after being taught by multiple intelligence based learning. Meanwhile students' motivation was measured by a Likert-scale questionnaire have been developed by other researcher which consisted of six aspects in total 35 items. The overall result showed that there was an improvement in students' motivation after being taught by multiple intelligence based learning.

**Keywords:** Multiple Intelligence based Learning, Students' Understanding,  
Students' Motivation

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**ABSTRACT**

Penelitian ini bertujuan untuk mengidentifikasi efek implementasi pembelajaran berbasis kecerdasan majemuk untuk meningkatkan pemahaman dan motivasi siswa pada topik sirkuit listrik. Terdapat 66 siswa dari kelas 8 SMP yang terpilih melalui teknik *convenience sampling* sebagai subjek kelas eksperimen dalam penelitian ini. Kelas eksperimen dibagi menjadi dua kategori yaitu sebagai kelas dengan pencapaian tinggi dan rendah berdasarkan kebijakan sekolah. Kelas eksperimen ini diinstruksikan untuk belajar melalui pembelajaran berbasis kecerdasan majemuk pada topik sirkuit listrik. Perlakuan yang diberikan berlangsung selama 6 pertemuan dalam 6 minggu dengan menggunakan *one group pre-test and post-test design*. Untuk mengetahui efek perlakuan pada pemahaman siswa, tes kognitif tentang topik sirkuit listrik yang terdiri dari 24 soal pun diberikan dan kemudian dianalisis menggunakan SPSS. Hasilnya menunjukkan nilai *normalized gain* 0.28 dan dikategorikan sebagai tingkat peningkatan rendah. Dengan kata lain, pemahaman siswa terhadap topik sirkuit listrik meningkat setelah diberi perlakuan menggunakan pembelajaran berbasis kecerdasan majemuk. Sedangkan motivasi siswa diukur dengan menggunakan kuesioner berskala Likert yang telah dikembangkan oleh peneliti lain yang terdiri dari 6 aspek dalam 35 total pernyataan. Hasilnya menunjukkan bahwa terdapat peningkatan motivasi siswa terhadap topik sirkuit listrik setelah diberi perlakuan menggunakan pembelajaran berbasis kecerdasan majemuk.

**Kata Kunci:** Pembelajaran berdasarkan Kecerdasan Majemuk, Pemahaman Siswa, Motivasi Siswa

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