

ABSTRAK

Zaskya Laksmitha Utami (NIM: 8176176028) “Pengaruh Model *Project Based Learning* terhadap Keterampilan *critical thinking, creative thinking, collaboration, & communication* (4C) Fisika Siswa di SMA N 9 Medan.”

Penelitian ini bertujuan: Untuk mengetahui apakah ada pengaruh model *project based learning* terhadap keterampilan *critical thinking, creative thinking, collaboration, & communication* (4C). Sampel penelitian ini dilakukan secara *random sampling* sebanyak dua kelas, dimana kelas pertama sebagai kelas eksperimen diterapkan model *project based learning* dan kelas kedua sebagai kelas kontrol diterapkan pembelajaran konvensional. Instrumen yang digunakan dalam penelitian ini yaitu instrumen tes keterampilan berpikir kritis dalam bentuk uraian sebanyak 7 soal, tes keterampilan sebanyak 10 soal, sedangkan tes keterampilan kolaborasi dan keterampilan komunikasi menggunakan lembar observasi. Penelitian ini menggunakan uji Manova untuk mencari pengaruh. Dari hasil penelitian dapat disimpulkan bahwa ada pengaruh model *project based learning* terhadap keterampilan *critical thinking, creative thinking, collaboration, & communication* (4C) yang diajarkan dengan model *project based learning* lebih baik dari pembelajaran konvensional. Keterampilan siswa yang diajarkan dengan model *project based learning* lebih baik daripada keterampilan siswa pembelajaran konvensional.

Kata Kunci : *project based learning* dan keterampilan 4C



ABSTRACT

Zaskya Laksmitha Utami (NIM: 8176176028) " *The Effect of Project Based Learning Model on Critical thinking, creative thinking, collaboration, & communication skills (4C) Physics Students at SMA N 9 Medan.*"

This study aims: To determine whether there is an effect of the project based learning model on critical thinking, creative thinking, collaboration, & communication (4C) skills. The sample of this research was carried out by random sampling of two classes, where the first class as the experimental class applied the project based learning model and the second class as the control class applied conventional learning. The instrument used in this study was a critical thinking skill test instrument in the form of a description of 7 questions, a skill test of 10 questions, while tests of collaboration skills and communication skills used observation sheets. This study uses the Manova test to find the effect. From the results of the study, it can be concluded that there is an effect of the project based learning model on critical thinking, creative thinking, collaboration, & communication (4C) skills taught by the project based learning model which is better than conventional learning. The skills of students taught by the project based learning model are better than those of conventional learning students.

Keywords: project based learning and skills 4C

