

**THE EFFECT OF THE COLLABORATIVE CREATIVITY LEARNING MODEL  
USING PHET SIMULATION ON STUDENTS' SCIENCE PROCESS SKILLS ON  
SIMPLE ELECTRICAL CIRCUIT MATERIALS.**

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**ABSTRACT**

*This study aims to determine the effect of the collaborative creativity learning model assisted by PhET simulation on simple electrical circuit material at SMA Negeri 1 Talang Ubi and to determine whether there is a significant effect of the collaborative creativity learning model on improving students' science process skills. This study uses a quasi-experimental research with a Nonequivalent Control Group Design. The total population in this study is the entire class XI IPA SMA Negeri 1 Talang Ubi as many as 6 classes. Then the samples used in this study were two classes, namely class XI IPA 1 and XI IPA 2 as many as 62 students and the sampling technique used probably sampling with simple random sampling where the sample was chosen randomly. Based on the results of the independent samples t-test test output, a significance value of  $0.000 < 0.05$  was obtained, which means that there were differences in the students' science process skills between the control and experimental classes. where  $H_a$  is accepted it means  $H_0$  is rejected. Therefore, it shows that there is an influence of the collaborative creativity learning model using PhET simulation on the students' science process skills.*

*Keywords: Collaborative Creativity Learning, PhET, KPS.*

**PENGARUH MODEL COLLABORATIVE CREATIVITY LEARNING  
MENGUNAKAN SIMULASI PHET TERHADAP KETERAMPILAN PROSES  
SAINS SISWA PADA MATERI RANGKAIAN LISTRIK SEDERHANA.**

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**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh model *collaborative creativity learning* berbantuan simulasi *PhET* pada materi rangkaian listrik sederhana di SMA Negeri 1 Talang Ubi dan mengetahui apakah ada pengaruh penggunaan model *collaborative creativity learning* terhadap peningkatan keterampilan proses sains siswa. Penelitian ini menggunakan jenis penelitian *quasi experimental* dengan desain *Nonequivalent Control Group Design*. Jumlah seluruh populasi dalam penelitian ini yaitu seluruh kelas XI IPA SMA Negeri 1 Talang Ubi sebanyak 6 kelas. Lalu sampel yang dipakai pada penelitian ini yaitu dua kelas yaitu kelas XI IPA 1 dan XI IPA 2 sebanyak 62 siswa dan teknik pengambilan sampel menggunakan *probably sampling* dengan *simple random sampling* dimana sampel dipilih secara acak. Berdasarkan hasil output uji *independent samples t-test* didapatkan nilai signifikansi  $0,000 < 0,05$  yang artinya terdapat perbedaan keterampilan proses sains peserta didik antara kelas kontrol dan eksperimen. yang dimana  $H_a$  diterima itu berarti  $H_0$  ditolak. Maka dari itu menunjukkan bahwa terdapat pengaruh model pembelajaran *collaborative creativity learning* menggunakan simulasi *PhET* terhadap keterampilan proses sains peserta didik.

Kata Kunci : *Collaborative Creativity Learning*, *PhET*, KPS