ABSTRAK

Hana Salsabila Shidiq, NIM 4191121009 (2023). Pengaruh Model *Project Based Learning* Dengan Menggunakan KWL *Chart* Terhadap Keterampilan Proses Sains Siswa Dalam Pembelajaran Fisika di SMA Negeri 2 Lubuk Pakam.

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *Project Based Learning* terhadap keterampilan proses sains siswa SMA. Jenis penelitian yang digunakan adalah *quasi eksperiment* dengan desain penelitian *two group pretest-posttest design*. Populasi yang digunakan yaitu siswa kelas XI MIA SMA Negeri 2 Lubuk Pakam yang berjumlah 2 kelas. Sampel penelitian terdiri dari dua kelas, kelas yang diambil yaitu XI MIA I sebagai kelas eksperimen dan XI MIA III sebagai kelas kontrol. Instrumen yang digunakan yaitu tes keterampilan proses sains berbentuk essay sebanyak 10 butir soal yang telah dinyatakan valid oleh validator. Berdasarkan hasil penelitian diperoleh nilai rata-rata *pretest* kelas eksperimen 20,68 dan hasil *pretest* kelas kontrol 18,85. Hasil pengujian hipotesis menunjukkan bahwa nilai signifikan $0{,}411 > \alpha = 0{,}005$, dinyatakan H_o diterima atau kedua kelas memiliki kemampuan awal yang sama. Setelah menerapkan model pembelajaran *Project Based Learning*, nilai rata-rata *posttest* kelas eksperimen sebesar 77,68 dan kelas kontrol sebesar 64,71. Hasil pengujian hipotesis menunjukkan bahwa nilai signifikan $0{,}00 < \alpha = 0{,}005$, dinyatakan bahwa H_a diterima berarti terdapat pengaruh yang signifikan model pembelajaran *Project Based Learning* terhadap keterampilan proses sains siswa.

Kata Kunci : *Project Based Learning*, Pembelajaran Fisika, Keterampilan Proses Sains.

ABSTRACT

Hana Salsabila Shidiq, NIM 4191121009 (2023). The Influence of Project Based Learning Models Using KWL Chart On Student Process Science Skills in Physics Learning at SMA Negeri 2 Lubuk Pakam

This study aims to determine the effect of the Project Based Learning model on high school students' science process skills. The type of research used is a quasi-experimental research design with a two group pretest posttest design. The population used was students of class XI MIA SMAN 2 Lubuk Pakam, totaling 2 classes. The research sample consisted of two classes, the class taken was XI MIA 1 as the experimental class and XI MIA III as the control class. The instrument used is a science process skills test in the form of an essay consisting of 10 questions that have been declared valid by the validator. Based on the results of the study, the average pretest score for the experimental class was 20,68 and the pretest for the control class was 18,85. The results of testing the hypothesis showed that a significant value of $0{,}41 > \alpha = 0{,}05$. *otherwise* H_0 *is accepted or both classes have the same initial abilities. After applying the Project Based Learning model, the average posttest score of the experimental class was 77,68 and that of the control class was 64,71. The results of testing the hypothesis showed that a significant value of* $0{,}00 > \alpha = 0{,}05$, *it is stated that* H_a *is accepted, meaning that there is a significant influence of the Project Based Learning model on student's science process skills.*

Keywords: *Project Based Learning, Physics Learning, Science Process Skills.*