

ABSTRAK

PjBL (*Project Based Learning*) merupakan model pembelajaran yang menggunakan proyek/kegiatan pratikum sebagai inti pembelajaran. Keterampilan proses sains merupakan keterampilan dasar yang digunakan dalam membangun konsep dan merupakan bagian penting dalam proses pembelajaran sains. Penelitian dilakukan di SMAN 6 Lhokseumawe. Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran berbasis proyek (*project based learning*) terhadap keterampilan proses sains siswa pada materi usaha dan energi kelas X SMAN 6 Lhokseumawe. Penelitian ini merupakan penelitian *quasi experimental design*. Teknik sampling yang digunakan yaitu *Purposive Sampling*. Sampel dalam penelitian ini adalah siswa kelas X IPA-1 sebagai kelas kontrol dengan jumlah siswa sebanyak 20 orang siswa dan kelas X IPA-3 sebagai kelas eksperimen dengan jumlah siswa sebanyak 20 orang siswa. Desain yang digunakan dalam penelitian ini adalah *Nonequivalent Control Group Design*. Untuk uji hipotesis digunakan uji *Independent sample test*. Hasil penelitian menunjukkan bahwa nilai rata-rata *posttest* kelas eksperimen 79,25 dan nilai rata-rata *posttest* kelas kontrol 65,25 dengan persentase rata-rata keterampilan proses sains adalah 82.81% sehingga dikategorikan sangat baik. Pada uji *Independent sample test* pada bagian "*Equal variances assumed*" diketahui nilai sig-2 tailed sebesar $0,000 < 0,05$, maka sesuai dengan dasar pengambilan keputusan dapat disimpulkan bahwa H_0 ditolak dan H_a diterima. Dengan artian bahwa terdapat pengaruh model pembelajaran berbasis proyek (*project based learning*) terhadap keterampilan proses sains siswa pada materi Usaha dan Energi kelas X SMAN 6 Lhokseumawe.

Kata Kunci: *Usaha dan Energi, Model Project Based Learning, Keterampilan Proses sains.*

ABSTRACT

PjBL (Project Based Learning) is a learning model that uses practicum projects/activities as the core of learning. Science process skills are the basic skills used in building concepts and are an important part of the science learning process. This research was conducted in SMAN 6 Lhokseumawe. This study aims to determine the effect of the project-based learning model on students' science process skills in class x SMAN 6 Lhokseumawe's work and energy. This research is a quasi-experimental design research. The sampling technique used is purposive sampling. The sample in this study were students of class X IPA-1 as the control class with 20 students and class X IPA-3 as the experimental class with 20 students. The design used in this study is the Nonequivalent Control Group Design. To test the hypothesis used Independent sample test. The results showed that the average posttest score of the experimental class was 79.25 and the posttest average value of the control class was 65.25 with an average percentage of science process skills of 82.81% so that it was categorized as good. In the Independent sample test in the "Equal variances assumed" section, it is known that the sig-2 tailed value is 0.000 < 0.05, so according to the basis for decision making it can be concluded that H₀ is rejected and H_a is accepted. In the sense that there is an influence of the project-based learning model on students' science process skills in work and Energy for class X SMAN 6 Lhokseumawe.

Keywords: Work and Energy, Project Based Learning Models, Science Process Skills.