ABSTRAK

Rodearsen Sihombing (4213321009) Pengaruh *Blended Learning* Berbasis Proyek Terhadap Hasil Belajar Siswa SMA pada Materi Fluida Statis Di SMANegeri 11 Medan Kelas XI

Penelitian ini bertujuan untuk menganalisis pengaruh model *Blended Learning* berbasis proyek terhadap hasil belajar fisika siswa pada materi fluida statis di SMA Negeri 11 Medan. Penelitian menggunakan metode eksperimen semu dengan desain *control group pretest-posttest*. Sampel ditentukan melalui *cluster random sampling*, yaitu kelas XI-7 sebagai kelas eksperimen dan XI-8 sebagai kelas kontrol. Data diperoleh melalui tes *pretest* dan *posttest* dan dianalisis menggunakan uji normalitas, homogenitas, uji-t satu pihak, serta perhitungan *effect size*. Hasil penelitian menunjukkan bahwa rata-rata *posttest* kelas eksperimen (89,19) lebih tinggi dibandingkan kelas kontrol (76,51), dengan nilai signifikansi 0,000 < 0,05 dan *effect size* 1,22 (kategori besar). Temuan ini menunjukkan bahwa *Blended Learning* berbasis proyek berpengaruh signifikan dan kuat dalam meningkatkan hasil belajar siswa pada materi fluida statis.

Kata Kunci: *Blended Learning*, project based learning, hasil belajar, fluida statis.

ABSTRACT

Rodearsen Sihombing (4213321009) The Effect of Project-Based Blended Learning on Senior High School Students' Learning Outcomes on Static Fluid Material at SMA Negeri 11 Medan, Grade XI

This study aims to analyze the effect of project-based Blended Learning on students' physics learning outcomes regarding static fluid material at SMA Negeri 11 Medan. The research employed a quasi-experimental method with a control group pretest–posttest design. The sample was selected through cluster random sampling, with class XI-7 serving as the experimental group and class XI-8 as the control group. Data were collected through pretest and posttest assessments and analyzed using normality and homogeneity tests, a one-tailed t-test, and effect size calculations. The results indicate that the experimental group achieved a higher posttest mean score (89.19) compared to the control group (76.51), with a significance value of 0.000 < 0.05 and an effect size of 1.22 (large category). These findings demonstrate that project-based Blended Learning has a significant and strong effect on improving students' learning outcomes in static fluid concepts.

Keywords: Blended Learning, project-based learning, learning outcomes, static fluid.