

ABSTRAK

IKHWAN ANANDA HUSNA : Pengaruh Model *Problem Based Learning* (PBL) Berbantuan Aplikasi *Quizizz* Pada Materi Alat Optik Terhadap Hasil Belajar Peserta Didik Kelas XI. **Program Studi Pendidikan Fisika FKIP Universitas Malikussaleh, 2024.**

Penelitian ini bertujuan untuk melihat pengaruh hasil belajar peserta didik dengan menerapkan model PBL berbantuan aplikasi *quizizz* di SMA Negeri 1 Rantau Selatan.

Jenis penelitian yang digunakan adalah kuantitatif dengan desain *quasi eksperimen* yang berbentuk *nonequivalent Control Group Desain*. Teknik pengambilan sampel dengan teknik *purposive sampling* dengan jumlah 50 peserta didik yaitu 25 peserta didik kelas XI MIA¹ sebagai kelas kontrol dan 25 peserta didik kelas XI MIA² sebagai kelas eksperimen. Instrumen pengumpulan data menggunakan tes soal pilihan ganda. Sedangkan pada analisis data menggunakan uji prasyarat yang meliputi uji normalitas, dan homogenitas, uji hipotesis dan uji *N-gain*.

Hasil penelitian menunjukkan bahwa nilai rata-rata *posttest* eksperimen 82,20 dan rata-rata nilai *posttest* kelas kontrol 76,20. Hasil Lembar Kerja Peserta Didik (LKPD) menunjukkan nilai rata-rata pada kelas eksperimen 83,00 dan kelas kontrol 80,00. Berdasarkan hasil uji hipotesis dengan menggunakan uji parametrik yaitu *independent t-test*, diperoleh hasil sig. (2-tailed) sebesar 0,026 < 0,05 artinya H_0 ditolak dan H_a diterima atau terdapat pengaruh model PBL berbantuan aplikasi *quizizz* terhadap hasil belajar peserta didik. Sedangkan rata-rata *N-Gain score* untuk kelas eksperimen yaitu 0,72 termasuk kategori tinggi. Selain itu peserta didik pada kelas eksperimen juga diberikan angket respon terhadap pembelajaran yang telah dilakukan, dan didapat hasil rata rata dari angket respon tersebut yaitu 90,73%. Sehingga dapat disimpulkan bahwa terjadi peningkatan hasil belajar peserta didik pada kelas eksperimen yang menerapkan model PBL berbantuan aplikasi *quizizz*.

Kata Kunci : Model *Problem Based Learning* (PBL), *Quizizz*, Hasil belajar

ABSTRAC

IKHWAN ANANDA HUSNA: The Influence of the Problem Based Learning (PBL) Model Assisted by the Quizizz Application on Optical Equipment Material on the Learning Outcomes of Class XI Students. **Malikussaleh University FKIP Physics Education Study Program, 2024.**

This research aims to determine the effect of student learning outcomes by implementing the PBL model assisted by the Quizizz application at SMA Negeri 1 Rantau Selatan.

The type of research used is quantitative with a quasi-experimental design in the form of a nonequivalent Control Group Design. The sampling technique was purposive sampling technique with a total of 50 students, namely 25 class XI MIA1 students as the control class and 25 class XI MIA2 students as the experimental class. The data collection instrument uses a multiple choice test. Meanwhile, data analysis uses prerequisite tests which include normality and homogeneity tests, hypothesis tests and N-gain tests.

The results showed that the average posttest score for the experiment was 82.20 and the average posttest score for the control class was 76.20. The results of the Student Worksheet (LKPD) show the average score in the experimental class is 83.00 and the control class is 80.00. Based on the results of hypothesis testing using parametric tests, namely the independent t-test, sig results were obtained. (2-tailed) of $0.026 < 0.05$, meaning that H_0 is rejected and H_a is accepted or there is an influence of the PBL model assisted by the Quizizz application on student learning outcomes. Meanwhile, the average N-Gain score for the experimental class is 0.72, which is in the high category. Apart from that, students in the experimental class were also given a response questionnaire regarding the learning that had been carried out, and the average result obtained from the response questionnaire was 90.73%. So it can be concluded that there was an increase in student learning outcomes in the experimental class which implemented the PBL model assisted by the Quizizz application.

Keywords: Problem Based Learning (PBL) model, Quizizz, learning outcomes