

ABSTRAK

Hamzah Saepul Anwar. 2025. **PENGARUH MODEL *PROBLEM BASED LEARNING* BERBANTUAN *QUIPPER* DALAM MENINGKATKAN HASIL BELAJAR SISWA PADA MATERI GERAK LURUS**

Penelitian ini dilatarbelakangi oleh rendahnya capaian hasil belajar dan minimnya ketertarikan siswa kelas X IPA SMA Terpadu Riyadlul Ulum pada materi gerak lurus. Untuk mengatasi permasalahan tersebut, diterapkan model *Problem Based Learning* (PBL) berbantuan *Quipper*. Tujuan penelitian adalah mengetahui pengaruh model *Problem Based Learning* (PBL) berbantuan *Quipper* dalam meningkatkan hasil belajar siswa pada materi gerak lurus. Dilaksanakan pada Mei 2025, penelitian ini menggunakan metode kuasi-eksperimen dengan desain *posttest-only control group*. Populasi studi meliputi 238 siswa kelas X IPA, dari mana 2 kelas dipilih sebagai sampel melalui *cluster random sampling*: Kelas X H (33 siswa) sebagai kelompok eksperimen dan Kelas X J (34 siswa) sebagai kelompok kontrol. Pengukuran hasil belajar dilakukan menggunakan posttest 39 soal pilihan ganda materi gerak lurus. Analisis data melibatkan uji normalitas, homogenitas, dan uji-t. Hasil uji hipotesis pada taraf signifikansi ($\alpha=0,05$) menunjukkan $t_{hitung} (2,65) > t_{tabel} (2,00)$. Dengan demikian, H_a diterima dan H_o ditolak, mengindikasikan adanya pengaruh signifikan model *Problem Based Learning* (PBL) berbantuan *Quipper* terhadap peningkatan hasil belajar siswa pada materi gerak lurus di kelas X IPA SMA Terpadu Riyadlul Ulum tahun ajaran 2024/2025.

Kata kunci: Gerak lurus, hasil belajar siswa, model *Problem Based Learning* (PBL) berbantuan *Quipper*.

ABSTRACT

This research was prompted by the low learning outcomes and minimal student interest in Linear Motion material among 10th-grade science students at SMA Terpadu Riyadlul Ulum. To address these issues, the Problem Based Learning (PBL) model, assisted by the digital platform Quipper, was implemented. The research's objective was to determine the influence of the PBL model assisted by Quipper in improving student learning outcomes in rectilinear motion. Conducted in May 2025, the research employed a quasi-experimental method with a posttest-only control group design. The research population comprised 238 10th-grade science students, from which 2 classes were selected as samples via cluster random sampling: Class X H (33 students) served as the experimental group, and Class X J (34 students) as the control group. Student learning outcomes were measured using a posttest consisting of 39 multiple-choice questions on Linear Motion. Data analysis included normality, homogeneity, and t-test analyses. The hypothesis test results, at a significance level of ($\alpha=0.05$), showed $t_{count} (2.65) > t_{table} (2.00)$. Consequently, H_a was accepted and H_o was rejected, indicating a significant positive influence of the PBL model assisted by Quipper on student learning outcomes in Linear Motion for 10th-grade science students at SMA Terpadu Riyadlul Ulum during the 2024/2025 academic year.

Keywords: linear motion, student learning outcomes, Problem Based Learning (PBL) model supported by Quipper.