

ABSTRAK

Husnaini : Pengaruh Model PBL Berbasis SAVI (*Somatic, Auditory, Visual Dan Intellectual*) Menggunakan Media Simulasi Phet Terhadap Minat dan Hasil Belajar Kognitif Siswa pada Materi Laju Reaksi. **Program Studi Pendidikan Kimia FKIP Universitas Malikussaleh, 2026.**

Penelitian ini bertujuan untuk mengetahui pengaruh penerapan model PBL berbasis SAVI (*Somatic, Auditory, Visual, Intellectual*) menggunakan media simulasi PhET terhadap minat belajar dan hasil belajar kognitif siswa. Penelitian ini menggunakan pendekatan kuantitatif dengan metode *quasi experiment desain nonequivalent pretest-posttest control group design*. Populasi penelitian adalah seluruh siswa kelas XI SMA Negeri 1 Gandapura yang berjumlah 124 siswa. Sampel terdiri dari 29 siswa kelas XI IPAS-1 sebagai kelas eksperimen dan 29 siswa kelas XI IPAS-2 sebagai kelas kontrol, dipilih melalui purposive sampling dari 124 siswa populasi. Data hasil belajar kognitif dikumpulkan melalui instrumen tes, sedangkan minat belajar diukur menggunakan angket, keduanya diberikan sebelum dan sesudah perlakuan. Analisis data dilakukan menggunakan *Independent Samples T-Test* dengan SPSS 25 pada taraf signifikansi 0,05

Hasil penelitian menunjukkan nilai signifikansi sebesar 0,001 ($<0,05$) pada hasil belajar kognitif dan 0,000 ($<0,05$) pada minat belajar. Dengan demikian, model PBL berbasis SAVI (*Somatic, Auditory, Visual, Intellectual*) menggunakan media simulasi PhET berpengaruh signifikan terhadap hasil belajar kognitif dan minat belajar siswa pada materi laju reaksi. Temuan ini menunjukkan bahwa penerapan model PBL berbasis SAVI menggunakan media simulasi PhET mampu meningkatkan hasil belajar kognitif serta minat belajar siswa pada materi laju reaksi.

Kata Kunci: Model PBL berbasis SAVI, Simulasi PhET, Minat belajar, Hasil belajar kognitif

ABSTRACT

Husnaini: The Effect of the SAVI (Somatic, Auditory, Visual, and Intellectual)-Based PBL Model Using PhET Simulation Media on Students' Interest and Cognitive Learning Outcomes in the Topic of Reaction Rates. **Chemistry Education Program FKIP Malikussaleh University, 2026.**

This study aims to determine the effect of implementing a SAVI (Somatic, Auditory, Visual, Intellectual)-based PBL model using PhET simulation software on students' interest in learning and cognitive learning outcomes. This study employed a quantitative approach using a quasi-experimental method with a nonequivalent *pretest-posttest* control group design. The study population consisted of all 124 eleventh-grade students at Gandapura State High School 1. The sample comprised 29 students from eleventh-grade class IPAS-1 as the experimental group and 29 students from eleventh-grade class IPAS-2 as the control group, selected through purposive sampling from the population of 124 students. Data on cognitive learning outcomes were collected through a test instrument, while learning interest was measured using a questionnaire; both were administered before and after the intervention. Data analysis was performed using an *Independent Samples T-Test* with SPSS 25 at a significance level of 0.05

The results showed a significance value of 0.001 (<0.05) for cognitive learning outcomes and 0.000 (<0.05) for learning interest. Thus, the SAVI (Somatic, Auditory, Visual, Intellectual)-based PBL model using PhET simulation media had a significant effect on students' cognitive learning outcomes and learning interest in reaction rate material. These findings indicate that the implementation of the SAVI-based PBL model using PhET simulation media is capable of improving students' cognitive learning outcomes and learning interest in the topic of reaction rates.

Keywords: SAVI-based PBL model, PhET simulation, Learning interest, Cognitive learning outcomes