

ABSTRAK

PENGARUH PEMBELAJARAN BERDIFERENSIASI MENGGUNAKAN MODEL *DISCOVERY LEARNING* TERHADAP KEMAMPUAN BERPIKIR KRITIS PADA MATERI HUKUM TERMODINAMIKA

Oleh

NI KOMANG SATYAWATI

Penelitian ini bertujuan untuk mengetahui pengaruh pembelajaran berdiferensiasi menggunakan model *discovery learning* terhadap kemampuan berpikir kritis pada materi hukum termodinamika. Penelitian ini dilaksanakan di SMA Negeri 1 Seputih Raman pada semester genap tahun ajaran 2024/2025, menggunakan sampel penelitian kelas XI.3 dan XI.4. Desain penelitian yang digunakan yaitu *quasi eksperimen* dengan jenis *one group pretest posttest* desain. Teknik pengambilan data kemampuan berpikir kritis menggunakan teknik tes, dengan 10 butir soal *essai* dengan indikator kemampuan berpikir kritis. Analisis data menggunakan uji *Paired Sample T-test* dan uji *One Way ANOVA*. Hasil penelitian menunjukkan pembelajaran berdiferensiasi menggunakan model *discovery learning* berpengaruh terhadap peningkatan kemampuan berpikir kritis dan dapat mereduksi potensi perbedaan peningkatan kemampuan berpikir kritis antar gaya belajar visual, auditori, kinestetik pada materi hukum termodinamika. Hal ini dapat dilihat dari tidak terdapat perbedaan rata-rata *n-gain* kemampuan berpikir kritis antara gaya belajar visual, auditori, kinestetik.

Kata Kunci: *Discovery Learning*, Kemampuan Berpikir Kritis, Pembelajaran Berdiferensiasi.

ABSTRACT

THE EFFECT OF DIFFERENTIATED LEARNING USING THE DISCOVERY LEARNING MODEL ON CRITICAL THINKING SKILLS IN THE TOPIC OF THERMODYNAMIC LAWS

By

NI KOMANG SATYAWATI

This study aims to determine the effect of differentiated learning using the discovery learning model on critical thinking skills in the topic of thermodynamic laws. The research was conducted at SMA Negeri 1 Seputih Raman during the even semester of the 2024/2025 academic year, using class XI.3 and XI.4 as research samples. The research design employed was a quasi-experimental method with a one-group pretest-posttest design. The data collection technique for critical thinking skills used a test method consisting of 10 essay questions based on critical thinking skill indicators. The results of the paired sample t-test showed a sig (2-tailed) value of $0.00 < 0.05$, indicating that differentiated learning using the discovery learning model had a significant effect on critical thinking skills in the topic of thermodynamic laws. The results of the one-way ANOVA test showed a sig value of $0.828 > 0.05$. Furthermore, the n-gain scores for learning styles were: visual 0.53, auditory 0.52, and kinesthetic 0.54, indicating that there was no significant difference in critical thinking skills among visual, auditory, and kinesthetic learning styles.

Keywords: *Discovery Learning, Critical Thinking, Differentiated Learning*