ABSTRAK

PENERAPAN LKPD PRAKTIKUM KIMIA BERBASIS METODE EKSPERIMEN MANDIRI UNTUK MENINGKATKAN HASIL BELAJAR SISWA SMA PADA KAJIAN MATERI LAJU REAKSI.

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Penelitian ini di latar belakangi oleh rendahnya hasil belajar kimia siswa, kurangnya pemanfaatan laboratorium, serta minimnya ketersediaan LKPD yang memfasilitasi praktikum mandiri. Penelitian ini bertujuan untuk mengkaji penerapan LKPD praktikum kimia berbasis metode eksperimen mandiri dalam meningkatkan hasil belajar siswa SMA pada materi laju reaksi. Metode penelitian yang digunakan adalah *one-group pretest-posttest design* dengan pendekatan deskriptif kuantitatif. Sampel penelitian berjumlah 36 siswa kelas XI SMA Negeri 13 Medan. Instrumen penelitian meliputi lembar validasi LKPD, tes hasil belajar (*pretest-posttest*), angket keterampilan laboratorium, dan angket minat belajar siswa. Hasil validasi menunjukkan bahwa LKPD layak digunakan dengan skor rata-rata aspek materi sebesar 77,6%, media 71,3%, dan bahasa 63%. Berdasarkan hasil uji N-Gain, terdapat peningkatan hasil belajar dengan rata-rata *pretest* 30,28 dan *posttest* 71,11 yang termasuk kategori peningkatan sedang. Keterampilan laboratorium siswa juga tergolong baik dengan rata-rata skor 83,75%. Selain itu, minat belajar siswa terhadap pelajaran kimia berada pada kategori sangat tinggi dengan rata-rata 90,37%. Penelitian ini menyimpulkan bahwa penggunaan LKPD praktikum kimia berbasis eksperimen mandiri efektif dalam meningkatkan hasil belajar, keterampilan laboratorium, dan minat belajar siswa pada materi laju reaksi.

Kata kunci : LKPD, Eksperimen Mandiri, Laju Reaksi, Hasil Belajar, Keterampilan Laboratorium

ABSTRACT

APPLICATION OF CHEMISTRY PRACTICUM LKPD BASED ON INDEPENDENT EXPERIMENTAL METHOD TO IMPROVE HIGH SCHOOL STUDENTS' LEARNING OUTCOMES IN THE STUDY OF REACTION RATE MATERIAL

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This research was conducted at SMA Negeri 13 Medan, totaling 36 students in grades XI-11. This research was motivated by the low chemistry learning outcomes of the students, lack of laboratory utilization, and minimal availability of LKPD that facilitates the independent practicum. This study aims to examine the application of LKPD for chemistry practicum based on the independent experimental methods in improving high school students' learning outcomes on the reaction rate material. The research method used was one-group pretest-posttest design with a quantitative descriptive approach. The research sample consisted of 36 students in grade XI of SMA Negeri 13 Medan. The research instruments included LKPD validation sheets, learning outcome tests (pretest-posttest), laboratory skills questionnaires, and student learning interest questionnaires. The validation results showed that LKPD was feasible to use with an average score of 77.6% for the material aspect, 71.3% for media, and 63% for language. Based on the results of the N-Gain test, there was an increase in learning outcomes with an average pretest of 30.28 and a posttest of 71.11 which was included in the moderate increase category. The students' laboratory skills are also classified as good with an average score of 83.75%. In addition, the students' interest in learning chemistry lessons is in the very high category with an average of 90.37%. This study concludes that the use of chemistry practicum LKPD based on independent experiment is effective in improving learning outcomes, laboratory skills, and the students' interest in learning reaction rate material. This LKPD is expected to be an alternative teaching material for teachers in optimizing laboratory practicum activities and increasing the students' motivation and understanding in chemistry learning.

Keywords: LKPD, Independent Experiment, Reaction Rate, Learning Outcomes, Laboratory Skills

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