

ABSTRAK

Risdayati Simorangkir, NIM 4182131011 (2022), Pengembangan Bahan Ajar Modul Terintegrasi *Problem Based Learning* Pada Materi Laju Reaksi.

Penelitian ini bertujuan untuk (1) mengetahui hasil analisis bahan ajar kimia pada materi laju reaksi yang digunakan di sekolah menurut standar BSNP, (2) mengetahui kelayakan (validitas) dari bahan ajar modul terintegrasi *problem based learning* pada materi laju reaksi berdasarkan kriteria BSNP (3) mengetahui peningkatan hasil belajar siswa setelah diberikan bahan ajar modul terintegrasi *Problem Based Learning (PBL)* pada materi laju reaksi, (4) mengetahui respon siswa terhadap bahan ajar modul terintegrasi *problem based learning* pada materi laju reaksi yang telah dikembangkan. Adapun penelitian ini menggunakan metode (R&D) dengan model ADDIE meliputi tahapan (*analysis, design, development, implementation dan evaluation*). Hasil analisis 3 buku kimia SMA diperoleh rata – rata 3,33 buku A, 3,17 buku B dan 3,13 buku C. Produk yang dikembangkan divalidasi oleh 4 validator ahli yang terdiri dari 2 orang dosen kimia dan 2 orang guru kimia. Rata – rata hasil analisis modul terintegrasi *problem based learning* oleh dosen dan guru kimia yang telah dikembangkan adalah 3,73 pada kategori sangat layak dan tidak perlu revisi. Penggunaan Modul terintegrasi *Problem Based Learning(PBL)* pada materi Laju Reaksi, diperoleh peningkatan hasil belajar sebesar 71.09% dengan nilai tertinggi 90 dan nilai terendah 70 serta rata-rata dari post-test sebesar 81,85 > Nilai KKM sebesar 75. Dari hasil uji hipotesis yang dilakukan menghasilkan $t_{hitung} > t_{tabel}$ yaitu sebesar 6,567 > 1,0705618. Angket respon siswa terhadap modul yang telah dikembangkan sebesar 88,33% (sangat tinggi). Dapat disimpulkan bahwa melalui pengembangan Bahan Ajar Modul Terintegrasi *problem based learning* pada materi Laju Reaksi dapat digunakan sebagai media pembelajaran dalam meningkatkan hasil belajar peserta didik.

Kata kunci: Kurikulum 2013, Modul, *Problem Based Learning*, Laju Reaksi, ADDIE



ABSTRACT

Risdayati Simorangkir, NIM 4182131011 (2022), Development of Teaching Materials Integrated Problem Based Learning Module on Reaction Rate Material.

This study aims to (1) determine the results of the analysis of chemistry teaching materials on the reaction rate material used in schools according to BSNP standards, (2) determine the feasibility (validity) of the integrated problem based learning module teaching materials on the reaction rate material based on BSNP criteria (3) knowing the increase in student learning outcomes after being given teaching materials for integrated Problem Based Learning (PBL) modules on the reaction rate material, (4) knowing student responses to teaching materials for integrated problem based learning modules on reaction rate materials that have been developed. This research uses the method (R&D) with the ADDIE model covering the stages (analysis, design, development, implementation and evaluation). The results of the analysis of 3 high school chemistry books obtained an average of 3.33 books A, 3.17 books B and 3.13 books C. The developed product was validated by 4 expert validators consisting of 2 chemistry lecturers and 2 chemistry teachers. The average result of the analysis of the integrated problem based learning module by chemistry lecturers and teachers that has been developed is 3.73 in the very feasible category and does not need revision. Using the integrated Problem Based Learning Module on the Reaction Rate material, an increase in learning outcomes was obtained by 71.09% with the highest score of 90 and the lowest score of 70 and the average post-test of 81.85 > KKM score of 75. From the results of hypothesis testing carried out produces $t_{count} > t_{table}$, which is 6.567 > 1.0705618. The student response questionnaire to the module that has been developed is 88.33% (very high). It can be concluded that through the development of Integrated Module Teaching Materials problem based learning on the Reaction Rate material can be used as a learning medium in improving student learning outcomes.

Keywords: 2013 Curriculum, Module, Problem Based Learning, Reaction Rate, ADDIE