

ABSTRAK

Eva Theresia Patrisia Marbun. NIM 8216142008. Pengembangan Lembar Kerja Peserta Didik Elektronik (E-LKPD) Kimia Model *Problem Based Learning* Untuk Memotivasi dan Meningkatkan Belajar Hasil Belajar Peserta Didik Kelas X SMA. Tesis: Program Pasca Sarjana Universitas Negeri Medan, 2023.

Penelitian ini bertujuan untuk memperoleh data analisis kebutuhan bahan ajar berupa E-LKPD Kimia Model *Problem Based Learning* yang dikembangkan sesuai standar BSNP, mengetahui kelayakan E-LKPD Kimia Model *Problem Based Learning*, mengetahui hasil belajar peserta didik, motivasi belajar peserta didik dan respon peserta didik terhadap penggunaan E-LKPD Kimia Model *Problem Based Learning* yang dikembangkan. Penelitian dilakukan di SMA Negeri 11 Medan menggunakan metode R & D dengan model ADDIE. Populasi penelitian terdiri dari seluruh peserta didik kelas X dengan sampel penelitian adalah kelas X IPA 7. Instrument penelitian terdiri dari angket kelayakan BSNP yang telah dimodifikasi, instrument tes hasil belajar berupa soal pilihan berganda, angket motivasi belajar peserta didik dan angket respon peserta didik terhadap penggunaan E-LKPD Kimia Model *Problem Based Learning*. Uji hipotesis dilakukan dengan uji *one sample t-test* dengan menggunakan taraf signifikansi 5% ($\alpha = 0,05$). Hasil penelitian diperoleh rata-rata kelayakan E-LKPD Kimia Model *Problem Based Learning* yang dikembangkan oleh ahli materi yaitu dosen kimia 3,80 dan guru kimia 3,91 dengan kategori valid tanpa perlu direvisi dan oleh ahli media diperoleh nilai rata-rata kelayakan sebesar 4,88 dengan kategori valid tanpa perlu direvisi. Hasil belajar kimia peserta didik lebih tinggi dari KKM menggunakan uji *one sample t-test* dimana diperoleh nilai sig. $0,000 < 0,05$ dan $t_{hitung} (10,289) > t_{tabel} (1,690)$ pada proses pembelajaran menggunakan E-LKPD Kimia Model *Problem Based Learning*. Motivasi belajar peserta didik mendapat nilai rata-rata angket motivasi sebesar 88,57% dengan kategori sangat termotivasi. Peserta didik memberikan respon sangat baik terhadap E-LKPD Kimia Model *Problem Based Learning* yang dikembangkan sebesar 90% maka E-LKPD Kimia Model *Problem Based Learning* yang dikembangkan dapat digunakan sebagai salah satu bahan ajar kimia di sekolah.

Kata Kunci: LKPD Elektronik (E-LKPD), *Problem Based Learning* (PBL)

ABSTRACT

Eva Theresia Patrisia Marbun. NIM 8216142008. Development of Chemistry Electronic Student Worksheets Problem Based Learning Model to Motivate and Improve Learning Outcomes of Grade X High School Students. Thesis: Postgraduate Program, State University of Medan, 2023.

This study aims to obtain analysis data on the needs of teaching materials in the form of Electronic Student Worksheets Chemistry Model Problem Based Learning which was developed according to National Education Standards Agency (BSNP), determine the feasibility of Electronic Student Worksheets Chemistry Model Problem Based Learning, find out student learning outcomes, student learning motivation and student responses on the use of the developed Chemistry Electronic Student Worksheets Model Problem Based Learning. The research was conducted at SMA Negeri 11 Medan using the R & D method with the ADDIE model. The research population consisted of all students in grade 10th with the research sample being class 10th Science 7. The research instrument consisted of a modified BSNP feasibility questionnaire, a learning outcome test instrument in the form of multiple choice questions, a student learning motivation questionnaire and a student response questionnaire to use Electronic Student Worksheets Chemistry Model Problem Based Learning. Hypothesis testing was carried out by testing the one sample t-test using a significance level of 5% ($\alpha = 0.05$). The results showed that the average eligibility of the Electronic Student Worksheets Chemistry Model Problem Based Learning was developed by material experts, namely chemistry lecturers 3.80 and chemistry teachers 3.91 with valid categories without needing to be revised and media experts obtained an average feasibility value of 4 .88 with a valid category without needing to be revised. The students' chemistry learning outcomes were higher than the KKM using the *one sample t-test* where the sig. $0.000 < 0.05$ and $t_{\text{count}} (10,289) > t_{\text{table}} (1.690)$ in the learning process using the Electronic Student Worksheets Chemistry Model Problem Based Learning. Students' learning motivation got an average motivational questionnaire score of 88.57% in the highly motivated category. Students gave an excellent response to the Chemistry Electronic Student Worksheets Problem Based Learning Model which was developed at 90%, so the Chemistry Electronic Student Worksheets Problem Based Learning Model that was developed can be used as chemistry teaching materials in schools.

Keywords: Electronic Student Worksheets, Problem Based Learning