ABSTRAK

Venty Eologi Hutabarat, NIM 4193331043 (2023). Pengembangan Modul Kimia *Higher Order Thinking Skill* (HOTS) Berbasis *Problem Based Learning* (PBL) Pada Materi Reaksi Redoks.

Penelitian ini bertujuan untuk mengetahui kevalidan, praktikalitas dan efektivitas modul kimia *Higher Order Thinking Skills* (HOTS) berbasis *Problem Based Learning* (PBL) pada materi reaksi redoks Sampel dalam penelitian ini adalah satu kelas yang terdiri dari 36 peserta didik. Instrumen yang digunakan adalah lembar observasi, lembar wawancara, angket kelayakan modul oleh validator, angket respon peserta didik, soal pilihan ganda yang terintegrasi soal *Higher Order Thinking Skills* (HOTS) sebanyak 40 butir soal. Disain penelitian menggunakan model 4-D (*Define*, *Design*, *Development*, *Disseminate*). Hasil penelitian kevalidan modul diperoleh rata-rata persentase oleh ahli materi dan media sebesar 84% dengan kategori sangat layak dan dapat digunakan di kelas. Persentase praktikalitas modul sebesar 91% dengan kategori modul sangat layak digunakan dan diterapkan dikelas oleh peserta didik. Stelah modul diterapkan dan digunakan dalam pembelajaran maka dapat diketahui keefektivan modul terhadap hasil belajar peserta didik yang meningkat sebanyak 70% dengan persentase rata-rata sebesar 56% kategori sedang. Dengan demikian dapat disimpulkan bahwa Modul Kimia *Higher Order Thinking Skill* (HOTS) Berbasis *Problem Based Learning* (PBL) Pada Materi Reaksi Redoks layak digunakan di kelas dan dapat meningkatkan hasil belajar peserta didik di Kelas X IPA 2.

Kata Kunci: Kelayakan Modul, Instrumen HOTS, Respon peserta Didik, Hasil Belajar

ABSTRACT

Venty Eologi Hutabarat, NIM 4193331043 (2023). Development of Problem Based Learning (PBL) Based Higher Order Thinking Skill (HOTS) Chemistry Module on Redox Reaction Material.

This study aims to determine the validity, practicality and effectiveness of the Problem Based Learning (PBL) based Higher Order Thinking Skills (HOTS) chemistry module on redox reaction material. The sample in this study was one class consisting of 36 students. The instruments used are observation sheets, interview sheets, module feasibility questionnaires by validators, student response questionnaires, multiple choice questions integrated with Higher Order Thinking Skills (HOTS) questions totaling 40 items. The research design uses the 4-D model (Define, Design, Development, Disseminate). The results of the module validity research obtained an average percentage by material and media experts of 84% with a very feasible category and can be used in class. The percentage of module practicality is 91% with the category of modules very feasible to use and apply in class by students. After the module is applied and used in learning, it can be seen that the effectiveness of the module on student learning outcomes has increased by 70% with an average percentage of 56% in the moderate category.

Keywords**:** *Module Feasibility, HOTS Instrument, Learner Response, Learning Outcome*