ABSTRAK

WAN AZURA. Pengembangan E-modul Berbasis SETS dengan Model PjBL pada Pembelajaran Koloid dan Pengaruhnya terhadap Hasil Belajar Siswa SMA. Tesis : Program Pascasarjana, Universitas Negeri Medan, 2021.

Pembelajaran berlangsung secara *online* harus menggunakan bahan ajar elektronik, salah satu bahan ajar digunakan e-modul untuk sebagai sumber belajar yang mampu meningkatkan kemampuan yang dimiliki siswa. Penelitian ini bertujuan untuk mengembangkan e-modul berbasis SETS dengan model PjBL yang layak berdasarkan standart BSNP, dan pengaruh implementasinya daalm meningkatkan *High Order Thinking Skill* . Jenis penelitian berorientasi pada R&D (*Research & Development*) dengan penerapan pendekatan ADDIE. Penelitian untuk implementasi e-modul berbasis menggunakan *pre-eksperiment design dengan One Group Pretest-Posttest Design*. Pemilihan sampel dilakukan dengan teknik purposive sampling, sampel yang diteliti adalah siswa SMA Negeri 1 Tanjungbalai sebanyak 32 siswa. Instrumen yang digunakan yaitu angket BSNP dan tes uraian *High Order Thinking Skill* (HOTS). Hasil penelitian menunjukkan bahwa pengembangan e-modul berbasis SETS dengan model PjBL pada pembelajaran koloid: (1) rata-rata kelayakan pengembangan e-modul untuk semua kriteria BSNP kategori layak (kelayakan isi =3.54, kelayakan bahasa = 3.59, kelayakan penyajian =3.84 dan kelayakan kegrafikan =3.68, maka e-modul layak digunakan, (2) Pada e-modul terdapat tugas proyek berbasis SETS dan hasil laporan tugas proyek setiap kelompok memproleh rata-rata 82.03 dimana tugas proyek berbasis SETS mampu meningkatkan kemampuan HOTS siswa. (3) Penggunaan e-modul berbasis SETS dan pengerjaan tugas proyek berpengaruh dalam meningkatkan *High Order Thinking Skill* (HOTS) siswa (dengan N-gain sebesar 0.44), (4) Rata-rata hasil belajar siswa 75.78, dimana terdapat perbedaan yang signifikan dengan nilai standart kompetensi minimal yaitu 70.

Kata Kunci : E-modul, SETS, PjBL, HOTS

ABSTRACT

WAN AZURA *Development of SETS-Based E-module with PjBL Model on Colloidal Learning and Its Effect on High School Student Learning Outcomes. Thesis: Postgraduate Program, Medan State University, 2021.*

Learning that takes place online must use electronic teaching materials, one of the teaching materials is used e-modules as a learning resource that can improve students' abilities. This study aims to develop a SETS-based e-module with a feasible PjBL model based on the BSNP standard, and the effect of its implementation in improving High Order Thinking Skills. This type of research is oriented to R&D (Research & Development) with the application of the ADDIE model. Research for the implementation of e-module based using pre-experiment design with One Group Pretest-Posttest Design. The sample selection was done by purposive sampling technique, the samples studied were students of SMA Negeri 1 Tanjungbalai as many as 32 students. The instruments used are the BSNP questionnaire and thedescription test High Order Thinking Skill (HOTS). The results showed that the development of SETS-based e-modules with the PjBL model on colloidal learning: (1) the average feasibility of developing e-modules for all BSNP criteria was eligible (content feasibility = 3.54, language eligibility = 3.59, presentation feasibility = 3.84 and the feasibility of graphics = 3.68, then the e-module is feasible to use, and (2) In the e-module there are SETS-based project assignments and the results of the project assignment reports for each group get an average of 82.03 where SETS-based project assignments are able to improve students' HOTS abilities (3) The use of SETS-based e-modules and working on project assignments have an effect on increasing students' High Order Thinking Skill (HOTS) (with an N-gain of 0.44), (4) The average student learning outcome is 75.78, where there is significant difference with the standard value. minimum competence is 70

Keywords: E-module, SETS, PjBL, HOTS