

ABSTRAK

Indra Tampubolon, NIM 4172131018 Pengembangan E-modul Berbasis *Problem Based Learning* (PBL) Pada Materi Ikatan Kimia SMA Kelas X

Penelitian ini bertujuan untuk memperoleh: (1) E-modul berbasis PBL yang telah memenuhi kriteria kelayakan isi, kelayakan bahasa, kelayakan penyajian, dan kelayakan kegrafikan sesuai dengan Badan Standar Nasional Pendidikan; (2) Respon (tanggapan) siswa terhadap aspek tampilan, materi dan manfaat e-modul berbasis PBL pada materi ikatan kimia. Jenis penelitian yang digunakan adalah *Research and Development* (R&D) yang telah dimodifikasi sesuai kebutuhan. Penelitian ini dilaksanakan dengan beberapa tahapan yaitu Analisis terhadap empat modul yang ada dilakukan berdasarkan Silabus kurikulum 2013 yang sedang berlaku maka didapatkan bahwa materi yang terdapat dalam modul I, II, III sudah sesuai dengan silabus kurikulum 2013 sementara modul IV belum sesuai dengan Silabus 2013, analisis modul oleh peneliti, perancangan dan pengembangan modul, validasi e-modul oleh dosen dan guru, dan kemudian penilaian e-modul yang dikembangkan oleh siswa. Rata-rata hasil validasi oleh dosen sebesar 3,53 yang berarti valid dan tidak perlu direvisi dan rata-rata validasi guru sebesar 3,86 yang berarti valid dan tidak perlu direvisi. Rata-rata persentase tingkat pendapat siswa terhadap e-modul berbasis PBL yang sudah dikembangkan sebesar 77,87%. Maka dapat disimpulkan bahwa E-modul berbasis *Problem Based Learning* (PBL) pada materi Ikatan kimia SMA kelas X valid dan tidak perlu direvisi. Berdasarkan respon siswa yang tinggi berarti siswa merasa tertarik dengan e-modul tersebut,

Kata Kunci: *Pengembangan, E-modul Berbasis Problem Based Learning (PBL), Instrument BSNP, Ikatan kimia, validasi bahan ajar*

ABSTRACT

Indra Tampubolon, NIM 4172131018 Development Of An Based E-modules for Problem Based Learning (PBL) in Class X High School Chemical Bonds

This study aims to obtain: (1) PBL-based E-modules that have met the criteria for content eligibility, language eligibility, presentation eligibility, and graphic eligibility according to the National Education Standards Agency; (2) Students' responses to aspects of the appearance, material and benefits of PBL-based e-modules on chemical bonding materials. The type of research used is Research and Development (R&D) which has been modified as needed. This research was carried out in several stages, namely the analysis of the four existing modules based on the current 2013 curriculum syllabus, it was found that the material contained in modules I, II, III was in accordance with the 2013 curriculum syllabus while module IV was not in accordance with the 2013 syllabus. modules by researchers, module design and development, validation of e-modules by lecturers and teachers, and then evaluation of e-modules developed by students. The average result of validation by lecturers is 3, 53 which means it is valid and does not need to be revised and the average teacher validation is 3.86 which means it is valid and does not need to be revised. The average percentage of student satisfaction with PBL-based e-modules that have been developed is 77.87%. So it can be concluded that the E-module based on Problem Based Learning (PBL) in the chemical bonding material for class X SMA is valid and does not need to be revised. Based on the high student response, it means that students feel interested in the e-module,

Keywords:Development, Problem Based Learning (PBL)-Based E-modules, BSNP Instruments, Chemical Bonds, validation of teaching materials

