

ABSTRACT

Ir. Luciyana Br Sirait, NIM 4191131018 (2023). Development of SETS (Science, Environment, Technology, And Society) Based Module to Improve Student Learning Outcomes in Colloid System for Class XI IPA SMA.

This study aims to determine the feasibility of SETS (Science, Environment, Technology, And Society) based modules on colloidal system, determine student learning outcomes after using SETS-based modules in learning and student responses to the modules. This study uses a 4-D development model consisting of define, design, development, and dissemination. This research was conducted at SMA Negeri 11 Medan which was carried out for 7 months. The feasibility of module was seen through a feasibility questionnaire for media and material experts based on the BSNP standard with a Likert scale of 1 to 5. Validation data obtained from media and material experts on SETS-based modules obtained an average percentage of 83.58% with the category valid/worthy. Student learning outcomes were obtained through the calculation of N-Gain test, which was equal to 0.74 in the high category and the average posttest score of students was 84.67. Student responses to the SETS-based module obtained an average percentage of 91.24% with a very high questionnaire interpretation. Based on the results obtained by the researcher, it can be concluded that this SETS-based module is appropriate for use in colloidal learning with a high student learning success rate and student responses that fall into very good criteria.

Keyword: Modules, SETS, Colloidal, 4-D Model.

ABSTRAK

Ir. Luciyana Br Sirait, NIM 4191131018 (2023). Pengembangan Modul Berbasis SETS (Science, Environment, Technology, And Society) Untuk Meningkatkan Hasil Belajar Siswa Pada Materi Sistem Koloid Kelas XI IPA SMA.

Penelitian ini bertujuan untuk mengetahui kelayakan modul berbasis SETS (*Science, Environment, Technology, And Society*) pada materi sistem koloid, mengetahui hasil belajar siswa setelah menggunakan modul berbasis SETS dalam pembelajaran dan mengetahui respon siswa terhadap modul. Penelitian ini menggunakan model pengembangan 4-D yang terdiri dari pendefinisian (*define*), perancangan (*design*), pengembangan (*development*), penyebaran (*dissemination*). Penelitian ini dilaksanakan di SMA Negeri 11 Medan yang dilaksanakan selama 7 bulan. Kelayakan modul dilihat melalui angket kelayakan ahli media dan ahli materi berdasarkan standar BSNP dengan skala likert 1 sampai 5. Data hasil validasi yang diperoleh dari ahli media dan ahli materi terhadap modul berbasis SETS memperoleh persentase rata-rata sebesar 83,58% dengan kategori valid/layak. Hasil belajar siswa diperoleh melalui perhitungan uji N-Gain yaitu sebesar 0,74 dengan kategori tinggi dan nilai rata-rata *posstest* siswa sebesar 84,67. Sedangkan respon siswa terhadap modul berbasis SETS memperoleh persentase rata-rata sebesar 91,24% dengan tafsiran angket sangat tinggi. Berdasarkan hasil yang didapatkan peneliti dapat disimpulkan bahwa modul berbasis SETS ini sudah layak digunakan dalam pembelajaran sistem koloid dengan tingkat keberhasilan belajar siswa tinggi serta respon siswa yang termasuk kedalam kriteria sangat baik.

Kata Kunci: Modul, SETS, Koloid, Model 4-D

