

ABSTRAK

Novita Desnalia Simamora, NIM 4173321023 (2017). Pengembangan Modul Pembelajaran Berbasis Saintifik Pada Materi Suhu dan Kalor di SMA Negeri 13 Medan.

Penelitian ini bertujuan untuk mengetahui tingkat kelayakan, keefektifan dan kepraktisan modul fisika dengan pendekatan saintifik pada pokok bahasan suhu dan kalor untuk kelas XI di SMA Negeri 13 Medan. Jenis penelitian ini merupakan *Research and Development* menggunakan model ADDIE dengan tahapan *analysis*, *design*, *development*, *implementation*, dan *evaluation*. Hasil penelitian menunjukkan modul berbasis pendekatan saintifik yang dikembangkan berada pada kategori sangat layak dengan persentase validasi materi 98,06%, validasi media 97,39%, dan validasi oleh guru fisika 96,36%. Pada uji kepraktisan diperoleh persentase uji kelompok kecil 79,46% dan pada uji kelompok besar diperoleh 89,74%. Berdasarkan perhitungan N-gain. Modul berbasis pendekatan saintifik termasuk dalam kategori tinggi dengan nilai 0,72. Ini menunjukkan hasil uji keefektifan modul fisika berbasis pendekatan saintifik memenuhi kriteria dan keefektifan modul dikategorikan baik.

Kata Kunci: ADDIE, pendekatan santifik, suhu dan kalor

ABSTRACT

Novita Desnalia Simamora, NIM 4173321023 (2017). Development of a Scientific Based Learning Module on Temperature and Heat Material at SMA Negeri 13 Medan.

This study aims to determine the level of feasibility and effectiveness of physics modules with a scientific approach on the subject of temperature and heat for class XI at SMA Negeri 13 Medan. This type of research is Research and Development using the ADDIE model with the stages of analysis, design, development, implementation, and evaluation. The results showed that the module based on the scientific approach developed was in the very feasible category with a percentage of material validation of 98.06%, media validation of 97.39%, and validation by physics teachers 96.36%. In the practicality test, the percentage of small group test was 79.46% and in the large group test obtained 89.74%. Based on the N-gain calculation, the scientific approach-based module is included in the high category with a value of 0.72. This shows the results of the effectiveness test of the physics module based on the scientific approach meet the criteria and the effectiveness of the module is categorized as good.

Keywords: ADDIE, scientific approach, temperature and heat