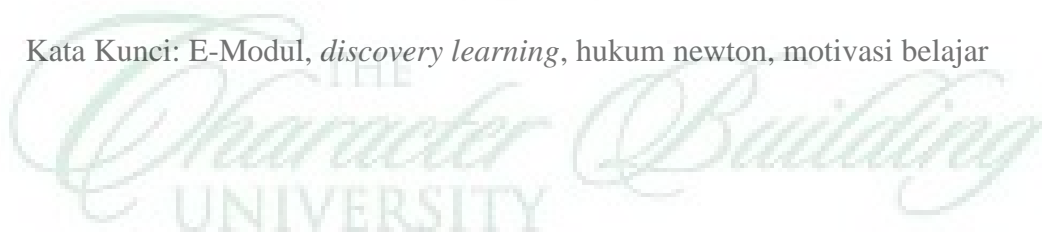


ABSTRAK

Novita Riskyka Sari Bukit, NIM 4183321023 (2022). Pengembangan E-Modul Berbasis *Discovery Learning* Pada Materi Hukum Newton Untuk Meningkatkan Motivasi Belajar Siswa Di SMA Negeri 7 Medan T.P 2021/2022.

Penelitian ini bertujuan untuk menghasilkan produk berupa e-modul berbasis *discovery learning* pada materi hukum newton yang layak digunakan, menganalisis tingkat kevalidan, kepraktisan, dan keefektifan e-modul berbasis *discovery learning* pada materi hukum newton untuk meningkatkan motivasi belajar siswa. Penelitian ini menggunakan metode penelitian dan pengembangan (R&D) dengan model ADDIE (*Analyze, Design, Develop, Implement, dan Evaluation*). Sampel dalam penelitian ini adalah 10 orang siswa kelas X MIPA 6 dalam skala kecil dan 34 orang siswa kelas X MIPA 5 dalam skala besar di SMA Negeri 7 Medan. Instrumen penelitian ini adalah angket analisis kebutuhan, angket analisis tugas, angket validasi ahli, angket kepraktisan guru fisika, angket kepraktisan respon siswa, soal *pretest* dan *posttest* hasil belajar, dan angket *pretest* dan *posttest* motivasi belajar. Hasil validasi ahli materi memperoleh rata-rata 98,3% dengan kategori sangat valid, hasil validasi ahli media memperoleh rata-rata 93% dengan kategori sangat valid, hasil validasi ahli strategi pembelajaran memperoleh rata-rata 89,7% dengan kategori sangat valid, dan hasil uji kepraktisan guru fisika memperoleh rata-rata 95% dengan kategori sangat praktis. Hasil uji kepraktisan respon siswa skala kecil dan skala besar memperoleh rata-rata 85,4% dan 88,8% dengan kategori sangat praktis. Hasil uji keefektifan terhadap hasil belajar memperoleh n-gain 0,64 dan 0,76 dengan kategori sedang dan tinggi. Hasil uji keefektifan terhadap motivasi belajar memperoleh n-gain 0,49 dan 0,50 dengan kategori sedang. Hal ini menunjukkan bahwa e-modul yang dikembangkan sangat layak dan sangat praktis sebagai bahan ajar serta efektif dalam meningkatkan motivasi belajar siswa.

Kata Kunci: E-Modul, *discovery learning*, hukum newton, motivasi belajar



ABSTRACT

Novita Riskyka Sari Bukit, NIM 4183321023 (2022). Development of E-Module Based on Discovery Learning on Newton's Law Materials to Improve Student Learning Motivation at SMA Negeri 7 Medan T.P 2021/2022.

This study aims to produce a product in the form of an e-module that is suitable for use, analyze the level of validity, practicality, and effectiveness of an e-module based on discovery learning on Newton's law material to increase students learning motivation. This research using research and development (R&D) methods and the ADDIE model (Analyze, Design, Develop, Implement, and Evaluation). The samples in this research were students of class X MIPA 6 on a small scale involving 10 students and class X MIPA 5 on a large scale involving 34 students at SMA Negeri 7 Medan. The instruments in this study were a needs analysis questionnaire, task analysis questionnaire, expert validation questionnaire, physics teacher practicality questionnaire, student response practicality questionnaire, pretest and posttest questions on learning outcomes, and pretest and posttest questionnaires on learning motivation. The results of material expert validation obtained an average of 98.3% with a very good category, the results of media expert validation obtained an average of 93% with a very good category. The results of the validation of learning strategists received an average of 89.7% with a very good category. The results of the practicality test of the physics teacher obtained an average of 95% in the very practical category. The results of the practicality test of small-scale and large-scale student responses received an average of 85.4% and 88.8% with very practical categories. The results of the effectiveness test on learning outcomes obtained n-gains of 0.64 and 0.76 with medium and high categories. The results of the effectiveness test on learning motivation received n-gains of 0.49 and 0.50 in the medium category. This shows that the e-module developed is very feasible and very practical as teaching materials and is effective in increasing students learning motivation.

Keywords: E-Module, discovery learning, newton's law, learning motivation

