

ABSTRAK

Lailu Suja, NIM 4193121015 (2023). Pengembangan Instrumen Tes Berbasis HOTS untuk Mengukur Keterampilan Berpikir Kritis Siswa Pada Materi Elastisitas dan Hukum Hooke.

. Penelitian ini bertujuan untuk mengembangkan instrumen tes berbasis HOTS dalam mengukur keterampilan berpikir kritis siswa pada materi elastisitas dan hukum Hooke di SMAS Dharmawangsa Medan yang telah memenuhi kriteria pengujian kelayakan instrumen meliputi validitas isi, validitas butir soal, uji reliabilitas, tingkat kesukaran, daya beda, dan uji respon siswa. Penelitian ini merupakan penelitian *Research and Development (R&D)* dengan menggunakan model ADDIE (*Analysis, Design, Development, Implementation, and Evaluation*). Penelitian ini dilakukan di SMAS Dharmawangsa Medan dengan subjek penelitian siswa kelas XI IPA yang telah mempelajari materi elastisitas dan hukum hooke. Berdasarkan hasil penelitian diperoleh bahwa 10 soal yang dikembangkan telah dinyatakan valid dan layak digunakan yang diperoleh dari uji validitas isi berdasarkan indeks V Aiken dan uji validitas butir soal. Uji reliabilitas diperoleh nilai sebesar 0,7912 dengan kategori reliabilitas tinggi. Tingkat kesukaran diperoleh nilai dengan rentang 0,513-0,808 dengan kriteria 2 butir soal dinyatakan mudah dan 8 butir soal dinyatakan sedang. Uji daya beda memperoleh nilai dengan rentang 0,227-0,606 dengan kriteria 7 butir soal dinyatakan baik dan 3 butir soal dinyatakan cukup. Uji respon siswa diperoleh persentase sebesar 80,1% dengan kategori sangat baik. Kesimpulan dari penelitian pengembangan yang telah dilakukan adalah instrumen tes berbasis HOTS untuk mengukur keterampilan berpikir kritis siswa pada materi elastisitas dan hukum hooke layak untuk digunakan.

Kata Kunci : Pengembangan Instrumen Tes, Keterampilan Berpikir Kritis, ADDIE, Elastisitas dan Hukum Hooke



ABSTRACT

Lailu Suja, NIM 4193121015 (2023). Development of a HOTS-Based Test Instrument to Measure Students Critical Thinking Skills on Elasticity and Hooke's Law.

This study aims to develop a HOTS-based test instrument to measure students' critical thinking skills on elasticity and Hooke's law content at SMAS Dharmawangsa Medan which has met the criteria for testing the feasibility of the instrument including content validity, item validity, test reliability, level of difficulty, discriminatory power, and student response test. This research is a Research and Development (R&D) study using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation). This research was conducted at SMAS Dharmawangsa Medan with research subjects in class XI IPA who had studied elasticity and Hooke's law. Based on the results of the study, it was found that the 10 questions developed were declared valid and feasible to use which were obtained from the content validity test based on the Aiken V index and the item validity test. The reliability test obtained a value of 0.7912 with the high reliability category. The level of difficulty obtained values within the range of 0.513-0.808 with the criteria of 2 items being declared easy and 8 items being declared moderate. The different power test obtained values in the range of 0.227-0.606 with the criteria of 7 items being declared good and 3 items being considered sufficient. The student response test obtained a percentage of 80.1% in the very good category. The conclusion from the development research that has been carried out is that the HOTS-based test instrument to measure students' critical thinking skills in the subject of elasticity and Hooke's law is feasible to use.

Keywords: Development of Test Instrument, Critical Thinking Skills, ADDIE, Elasticity and Hooke's Law