

ABSTRAK

Florence Jean Patricia, NIM 4213121028 (2021), Pengembangan Instrumen *Higher Order Thinking Skill* Pada Materi Fluida Statis di SMA Negeri 18 Medan

Penelitian ini diangkat oleh permasalahan banyaknya siswa yang mengalami kesulitan dalam menyelesaikan soal-soal yang menuntut penalaran, analisis hubungan antar konsep, serta penerapan konsep fisika dalam situasi baru. Salah satu penyebab utamanya adalah keterbatasan instrumen penilaian yang mampu mengukur kemampuan berpikir tingkat tinggi secara valid dan reliabel. Pengembangan instrumen *Higher Order Thinking Skill* pada materi fluida statis diharapkan dapat menjadi alternatif penilaian yang tidak hanya menilai hasil akhir, tetapi juga proses berpikir siswa dalam memecahkan masalah. Metode penelitian menggunakan model *ADDIE* (*Analysis, Design, Development, Implementation, Evaluation*). Subjek penelitian adalah 36 siswa kelas XI di SMA Negeri 18 Medan. Hasil validasi ahli memperoleh persentase kelayakan 100% (sangat layak), validitas butir soal memenuhi kriteria ($r > 0,329$), reliabilitas tinggi ($\alpha = 0,834$), tingkat kesukaran soal berada pada kategori sedang, dan daya beda soal kategori baik. Respon siswa menunjukkan kategori cukup. Instrumen ini dapat digunakan untuk mengukur kemampuan berpikir tingkat tinggi siswa.

Kata Kunci: HOTS, Fluida Statis, ADDIE, Instrumen

ABSTRACT

Florence Jean Patricia, NIM 4213121028 (2021), Development Of Higher-Order Thinking Skill Instruments On Static Fluid Materials At State High School 18 Medan

This research was raised by the problem of many students who experience difficulties in solving questions that require reasoning, analysis of relationships between concepts, and the application of physics concepts in new situations. One of the main causes is the limited assessment instruments that are able to measure higher-order thinking skills validly and reliably. The development of a Higher Order Thinking Skill instrument on static fluid material is expected to be an alternative assessment that not only assesses the final result, but also the students' thinking process in solving problems. The research method uses the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The research subjects were 36 grade XI students at SMA Negeri 18 Medan. The results of expert validation obtained a feasibility percentage of 100% (very feasible), the validity of the test items met the criteria ($r > 0.329$), high reliability ($\alpha = 0.834$), the level of difficulty of the test was in the moderate category, and the discrimination power of the test was in the good category. Student responses showed a sufficient category. This instrument can be used to measure students' higher-order thinking skills.

Keywords: HOTS, Static Fluid, ADDIE, Instrument