

ABSTRAK

Putri Pratiwi, NIM 4191121005 (2019). Pengembangan Instrumen Tes Keterampilan Berpikir Kritis Siswa pada Materi Fluida Statis di SMA/MA.

Penelitian ini bertujuan untuk mengetahui kelayakan instrumen tes keterampilan berpikir kritis siswa pada materi fluida statis yang telah memenuhi kriteria pengujian kelayakan instrumen yang meliputi aspek 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 penelitian Borg & Gall dan model pengembangan ADDIE (*Analysis, Design, Development, Evaluation, and Implementation*). Subjek dari penelitian adalah siswa-siswi kelas XI MIPA 1 MAN Serdang Bedagai. Instrumen tes yang dikembangkan terdiri dari 10 butir soal berbentuk esai untuk mengukur keterampilan berpikir kritis siswa yang disusun menggunakan indikator keterampilan berpikir kritis Facione yang meliputi interpretasi, analisis, evaluasi, inferensi, penjelasan, dan regulasi diri. Data hasil validasi isi menggunakan koefisien kesepakatan *Cohen's Kappa*, diperoleh nilai kappa sebesar 0,80 dengan kriteria tinggi sehingga layak untuk di uji coba. Uji coba lapangan terbatas diperoleh 7 soal valid dan 3 soal tidak valid. Nilai reliabilitas sebesar 0,783 kategori tinggi, tingkat kesukaran diperoleh 80% sedang, 20% mudah, daya beda diperoleh 20% sangat baik, 20% baik, 50% cukup, 10% jelek, dan respon peserta didik terhadap instrumen tes keterampilan berpikir kritis sebesar 81,82% kategori sangat baik. Uji coba lapangan lebih luas diperoleh 8 soal valid dan 2 soal tidak valid. Nilai reliabilitas sebesar 0,582 kategori sedang, tingkat kesukaran diperoleh 80% sedang, 20% mudah, daya beda diperoleh 30% sangat baik, 40% baik, 10% cukup, 20% jelek, dan respon peserta didik terhadap instrumen tes keterampilan berpikir kritis sebesar 78,23% kategori sangat baik.

Kata kunci : Pengembangan instrumen, keterampilan berpikir kritis, fluida statis



ABSTRACT

Putri Pratiwi, NIM 4191121005 (2019). Development of Student Critical Thinking Skills Test Instruments on Static Fluid Material in SMA/MA.

The study aims to identify the validity of the student's critical thinking skills on static fluid materials that have met the instrument validity test criteria that include aspects of validity content, validity subject matter, reliability test, difficulty level, differential power, and student response test. This research is research and development (R&D) using the Borg & Gall research model and ADDIE development model. (Analysis, Design, Development, Evaluation, and Implementation). Subject of the study are students of class XI MIPA 1 MAN Serdang Bedagai. The test instrument developed consists of 10 essay-shaped subjects to measure the critical thinking skills of students, which are structured using the Critical Thinking Skills Indicator of Facione that includes interpretation, analysis, evaluation, inference, explanation, and self-regulation. The content validation results using the Cohen's Kappa agreement coefficient, obtained a kappa value of 0.80 with high criteria so it is eligible for testing. The field test was limited to 7 valid and 3 invalid questions. Reliability scores of 0.783 high categories, difficulty levels obtained 80% moderate, 20% easy, differential gained 20% excellent, 20% good, 50% sufficient, 10% ugly, and student response to critical thinking skills test instruments of 81.82% category excellent. A total of 8 valid and 2 invalid questions were obtained. The reliability score of 0.582 category is medium, the difficulty level is 80% moderate, 20% easy, the differential gained is 30% excellent, 40% good, 10% sufficient, 20% bad, and the student's response to the critical thinking skills test instrument is 78.23% excellent.

Keywords: Development of instruments, critical thinking skills, static fluid

