

ABSTRAK

Aulia Rahmi, NIM 4183321015 (2023). Pengembangan Instrumen Tes *Higher Order Thinking Skill* (HOTS) Berbasis Keterampilan Pemecahan Masalah Pada Materi Suhu Dan Kalor Di SMA N 2 Percut Sei Tuan

Penelitian pengembangan instrumen tes berbasis pemecahan masalah pada materi suhu dan kalor yang telah dilakukan bertujuan untuk mengetahui proses pengembangan dan kelayakan instrumen tes yang dilihat dari validitas, realibilitas, daya pembeda, tingkat kesukaran, dan respon siswa terhadap instrumen yang diberikan. Jenis penelitian yang digunakan adalah *Research and Development* (R&D) dengan model ADDIE yakni, *Analisis, Design, Develop, Implement, Evaluate*, yang dibatasi sampai *implement*. Subjek pada penelitian ini diambil secara random sampling yaitu siswa/i kelas XI IPA yang berjumlah 30 siswa/i. Instrumen tes disusun dalam bentuk uraian mengacu pada indikator soal dan aspek pemecahan masalah. Hasil validitas isi menyatakan bahwa 10 soal yang dikembangkan berada dalam kategori sangat layak. Berdasarkan hasil penelitian, instrumen tes berbasis HOTS telah memenuhi kriteria analisis butir soal yang baik seperti validitas memiliki 80% soal valid dan 20% tidak valid dengan realibilitas yang memiliki kategori sangat tinggi. Tingkat kesukaran memiliki 30% kategori mudah, 10% kategori sukar, dan 60% kategori sedang. Daya beda butir soal memiliki persentase 20% soal memiliki daya beda baik, 30% kategori cukup dan 50% kategori jelek. Hasil angket respon siswa terhadap soal yang dikembangkan 78,1% termasuk dalam kategori baik. Berdasarkan hasil penelitian disimpulkan bahwa pengembangan instrumen tes HOTS ini layak digunakan untuk mengukur keterampilan pemecahan masalah pada materi suhu dan kalor.

Kata Kunci : Pengembangan, Instrumen Tes, Pemecahan Masalah.



ABSTRACT

Aulia Rahmi, NIM 4183321015 (2023). Development of Higher Order Thinking Skill (HOTS) Test Instruments Based on Problem Solving Skills on Temperature and Heat Material at SMA N 2 Percut Sei Tuan

Research on the development of test instruments based on problem solving on temperature and heat material that has been carried out aims to determine the development process and the feasibility of test instruments in terms of validity, reliability, discriminating power, level of difficulty, and student responses to the given instruments. The type of research used is Research and Development (R&D) with the ADDIE model namely, Analysis, Design, Develop, Implement, Evaluate, which is limited to implementation. Subjects in this study were taken by random sampling, namely students of class XI IPA, totaling 30 students. The test instrument is arranged in the form of a description referring to the question indicators and problem solving aspects. The results of content validity stated that the 10 questions developed were in the very feasible category. Based on the results of the study, the HOTS-based test instrument met the criteria for good item analysis such as validity having 80% valid questions and 20% invalid items with very high reliability. Difficulty level has 30% easy category, 10% difficult category, and 60% medium category. The different power of the items has a percentage of 20% of the questions having good discriminating power, 30% in the sufficient category and 50% in the bad category. The results of the student response questionnaire to the questions developed were 78.1% included in the good category. Based on the results of the study it was concluded that the development of the HOTS test instrument was feasible to be used to measure problem solving skills in the material temperature and heat.

Keywords: Development, Test Instruments, Problem Solving.

