

## ABSTRACT

**Muhammad Ainal Yusri, NIM 4181121004 (2018). Development of Scientific Literacy-Based Test Instrument to Measure Students' Critical Thinking Skills.**

This research is based on the lack of availability of science literacy-based test instruments used in the learning process to measure students' critical thinking skills. This study aims to determine the feasibility of the test instrument in terms of the validity, reliability, discrimination power, difficulty level, and effectiveness of distractors in the test instruments that have been developed. This research is development research using the ADDIE research method (Analysis, Design, Development, Implementation, and Evaluation). The results of expert validation show that 20 test instruments are in the very feasible category based on indicators of the aspect of material, construction, and language as well as problems that arise contextually. Meanwhile, the empirical item validity obtained in 17 questions are said to be valid or feasible to use. The reliability test obtained a score of 0.95 with a very high category. The discrimination power on multiple choice questions shows 22% in very good category, 56% in good category, and 22% in the sufficient category. The discrimination power on the essays question shows 75% in good category, and 25% sufficient category. The difficulty level of the question items with a percentage of 12% in the difficult category, 47% in the medium category, and 41% in the easy category. The effectiveness of distractor obtained 5.55% in fixed category and 94,44% in accepted category. It can be concluded that science literacy-based test instruments are feasible to measure students' critical thinking skills.

**Keywords:** Development, Instrument Test, Scientific Literacy, Critical Thinking Skills.

