

## ABSTRACT

### **Khairina Rangkuti, 4183121048 (2018). The Development Of Physics Test Based On PISA (Programme Of International Student's Assessment)**

This research was based on the the low level of Indonesian students's scientific literacy shown by the 2018 PISA results. The results of interviews with Physics teachers at MAN 1 Medan stated that students were not familiar to working on PISA science literacy-based questions. This research aims to develop a test instrument that meet the test satandard qualification and PISA qualifications. This research method used is 4D method (Define, Design, Development, Disseminate). The Data collection in this research used instruments in the form of validation sheets, response questionnaires, and written tests. This research outcame is a proper test instrumedt based on PISA with 20 question items. Based on expert validity the validation correlation ration of 1. The empirical validity of the items showed all test instrument's items are valid with  $r_{xy}$  value in the range 0,397- 0,596. The reliability with Cronbach's Alpha value of 0.816. The discrimination power is in the good and very good categories. The distribution of the level of difficulty of the questions is 5% difficult questions, 55% moderate questions, and 40% easy questions. The physical science literacy ability of the 10th grade students who were participated in this study showed that the students achieved a relatively good average score. Students has the lowest competence in interpreting scientific data and had the same ability in both content knowledge and procedural knowledge.

**Keyword:** Instrument test, Physics, PISA, Science Literacy

