

ABSTRAK

Shabrina Dzahroh (8186175003). **Pengembangan Instrumen Tes Berbasis Pendekatan PISA Pada Materi Kinematika Gerak Di SMA.** Tesis. Medan: Program Studi Pendidikan Fisika, Pascasarjana Universitas Negeri Medan, 2023.

PISA adalah studi tentang program penilaian peserta didik tingkat internasional yang diselenggarakan oleh organisation for *Economic Cooperation and Development* (OECD) atau organisasi untuk kerjasama ekonomi dan pembangunan. Tujuan dari studi PISA adalah untuk menguji dan membandingkan prestasi anak-anak sekolah di seluruh dunia, dengan maksud untuk meningkatkan metode-metode pendidikan dan hasil-hasilnya. Penelitian bertujuan untuk mengetahui validitas, reliabilitas, daya pembeda dan tingkat kesukaran serta keefektifan tes berbasis PISA pada materi kinematika gerak di SMA yang telah dikembangkan. Populasi penelitian ini adalah siswa kelas XI MIA SMA An Nizam Medan sebanyak 22 orang siswa sebagai kelas kecil, dan siswa kelas XI MIA MAN 1 Medan sebanyak 42 orang siswa sebagai kelas besar. Adapun Jenis penelitian adalah penelitian dan pengembangan atau *Research and Development* (R&D). Instrumen yang digunakan dalam penelitian adalah *multiple choice* dan tes uraian, serta angket lembar penilaian peserta didik. Hasil uji coba kelompok kecil didapatkan soal yang sesuai dengan karakteristik butir soal adalah sebanyak 33 soal dari 38 soal yang diujikan. Hasil analisis yang didapat belum semua instrumen memenuhi kriteria tes yang baik sehingga perlu adanya revisi untuk soal yang belum baik. Selanjutnya soal yang telah direvisi digunakan pada uji coba kelompok besar dimana jumlah soal berkurang menjadi 33 butir soal. Dan hasil Uji coba kelompok besar selesai dilaksanakan, dilakukan analisis hasil secara kuantitatif. Hasil analisis yang didapat semua instrumen memenuhi kriteria tes yang baik, selanjutnya soal disimpan pada bank soal berbasis pendekatan PISA materi kinematika gerak di SMA jumlah soal berjumlah 33 soal.

Kata Kunci: *PISA, Research and Development (R&D)*



ABSTRACT

Shabrina Dzahroh (8186175003). **Development of Test Instruments Based on the PISA Approach to Motion Kinematics Material in High School.** Thesis. Medan: Physics Education Study Programme, Postgraduate, State University of Medan, 2023.

PISA is a study of international student assessment programs conducted by the Organisation for Economic Cooperation and Development (OECD). The purpose of the PISA study is to test and compare the achievements of school children around the world, with a view to improving educational methods and results. The study aims to determine the validity, reliability, distinguishing power and difficulty level as well as the effectiveness of PISA-based tests on motion kinematics material in high school that has been developed. The population of this study were students of class XI MIA SMA An Nizam Medan as many as 22 students as a small class, and students of class XI MIA MAN 1 Medan as many as 42 students as a large class. The type of research is research and development (R&D). The instruments used in the study were multiple choice and description tests, as well as a questionnaire for students' assessment sheets. The results of the small group trial obtained questions that were in accordance with the characteristics of the items were 33 questions out of 38 questions tested. The results of the analysis obtained have not all instruments met the criteria for a good test so that revisions are needed for questions that are not good. Furthermore, the revised questions were used in the large group trial where the number of questions was reduced to 33 items. And the results of the large group trial were completed, quantitative analysis of the results was carried out. The results of the analysis obtained by all instruments meet the criteria of a good test, then the questions are stored in the question bank based on the PISA approach to motion kinematics material in high school, the number of questions is 33 questions.

Keywords: PISA, Research and Development (R&D)