

ABSTRAK

Telah dilakukan penelitian untuk mengembangkan alat ukur tes literasi sains tema pemanasan global untuk siswa SMP. Penelitian *research and development* ini dilaksanakan dengan melibatkan 112 siswa yang mengikuti pembelajaran IPA di tiga SMP di Kota Bandung. Pengambilan sampel dilakukan dengan teknik *random sampling*. Tes dikonstruksi mengikuti *framework* PISA 2015 dan berbentuk soal pilihan ganda yang berjumlah 36 soal dengan tema pemanasan global yang mencakup tiga konsep esensial pada materi fotosintesis, pencemaran lingkungan, penyebab dan dampak pemanasan global. Karakteristik tes dianalisis menggunakan CVR dan analisis tes klasik yang meliputi validitas item, indeks kesukaran, daya beda, koefisien point biserial, reliabilitas, dan Ferguson's delta. Hasil akhir dari pengembangan ini diperoleh 30 soal literasi sains tema pemanasan global dengan karakteristik mampu mengukur konten yang hendak diukur dan mampu membedakan antara siswa kemampuan rendah dan tinggi.

Kata kunci: alat ukur tes, literasi sains, pemanasan global.

ABSTRACT

A research and development study was conducted to develop a scientific literacy instrument test for the global warming theme assessed for middle school students. Random sampling method was used and was arranged involve 112 fifteen-year students who has attend the natural science course at three middle schools in Bandung. The test was 36 multiple-choice items based on the framework PISA 2015 in the global warming. The theme encompassed three essential concepts, photosynthesis, environmental pollution and the causes and effects of global warming. Characteristics of the test was then analyzed by using content validity ratio and classical test analysis, including test reliability, item content validity, item difficulty index, item discrimination index, point biserial coefficient and Ferguson's delta. As the result, 30 scientific literacy items test in the global warming theme was performed. The assessment was able to measure the expected concepts and discriminated high-achieving students from the lower.

Keywords: *instrument test, scientific literacy, global warming.*