

ABSTRAK

Penelitian ini bertujuan untuk menghasilkan soal-soal matematika model Programme For International Student Assessment (PISA) konten *change and relationship* yang mengukur kemampuan komunikasi matematis siswa di sekolah menengah pertama. Metode penelitian ini menggunakan *development study* tipe *formative evaluation* yang memiliki dua tahap yaitu tahap persiapan (*preliminary*) dan tahap *formative evaluation*. Penelitian dilakukan di kelas VIII Sekolah Menengah Pertama dengan teknik pengumpulan data melalui walkthrough, tes, wawancara. Berdasarkan ujicoba yang dilakukan dapat disimpulkan bahwa tahap persiapan terdiri dari analisis tujuan pembelajaran matematika dalam kurikulum dan PISA, analisis siswa, analisis materi, dan soal matematika model PISA sebelumnya serta menganalisis indikator komunikasi. Tahap *formative evaluation* yang terdiri dari *self evaluation*, *expert review*, *one-to-one*, *small group*, dan *field test*. Dihasilkan perangkat soal matematika model PISA pada konten *change and relationship* untuk mengetahui kemampuan komunikasi PISA yang memenuhi aspek validitas. Kemampuan komunikasi siswa termasuk dalam kategori cukup baik dengan persentase 39%. Level kemampuan siswa dalam menyelesaikan soal matematika model *Programme For International Student Assessment (PISA)* konten *change and relationship* pada level 4 sebesar 41,5% , level 5 sebesar 40,7% dan level 6 sebesar 24,2%.

Kata Kunci: PISA, *Change and Relationship*, *Formative Evaluation*, Kemampuan Komunikasi Matematis

ABSTRACT

This research aims to produce mathematical questions in the PISA model of change and relationship content that measures students' mathematical communication skills in junior high schools. This research method uses development study which has two stages, namely the preliminary and the formative evaluation. Based on the tests conducted, it can be concluded that the preparation phase consists of analyzing Indonesia curriculum and PISA, student, material, mathematical problems of the previous PISA model and communication indicators. Formative evaluation phase which consists of self evaluation, expert review, one-to-one, small group, and field test. The PISA model of mathematical problems produced in change and relationship content to determine PISA communication capabilities that meet the aspects of validity. Communication skills of students included in the fairly good category with a percentage of 39%. Level of students' ability to solve math problems Programme For International Student Assessment (PISA) change and relationship content at level 4 is 41.5%, level 5 is equal to 40.7% and level 6 of 24.2%.

Keywords: PISA, Change and Relationship, Formative Evaluation, Communication Mathematics Ability
