

ABSTRAK

WAHIDA AMALIA. Pengembangan Soal Matematika PISA-LIKE Pada Konten *Change and Relationship* Untuk Mengukur Kemampuan Pemecahan Masalah Matematis Siswa SMP. Tesis. Medan. Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan. 2020

Penelitian ini bertujuan untuk: menghasilkan soal matematika *PISA-LIKE* pada konten *Change and Relationship* yang valid dan praktis untuk mengukur kemampuan pemecahan masalah matematis siswa SMP. Penelitian ini merupakan penelitian pengembangan (*Research and Development*) tipe *formative evaluation* Tessmer yang terdiri dari dua tahap yakni; (1) tahap *preliminary*, dan (2) tahap *formative evaluation* yang meliputi *self-evaluation* dan *prototyping*. Untuk tahap *prototyping* terdiri dari *expert reviews*, *one-to-one*, *small group*, dan *field test*. Subjek penelitian ini adalah siswa kelas IX-I SMP Dr. Wahidin Sudirohusodo yang berjumlah 36 siswa.

Hasil penelitian menunjukkan bahwa telah berhasil dikembangkan soal matematika *PISA-LIKE* pada konten *Change and Relationship* yang berkualitas dari aspek kevalidan dan kepraktisan. Valid berdasarkan hasil validasi oleh para ahli yang menyatakan “soal dapat digunakan dengan sedikit revisi”. Praktis berdasarkan penilaian dari ahli, angket respon guru dan angket respon siswa. Hasil angket respon guru sebesar 83,33% adalah “sangat positif” terhadap soal yang telah diberikan, sedangkan respon siswa sebesar 75% adalah “positif” terhadap soal yang telah diberikan oleh peneliti. Berdasarkan hasil analisis data tingkat kemampuan pemecahan masalah matematis siswa terhadap soal yang dikembangkan paling banyak berada pada kategori “sedang” sebanyak 15 siswa (41,67%).

Kata Kunci: Soal matematika *PISA-LIKE*, Pemecahan Masalah Matematis, *Formative Evaluation*, *Change and Relationship*



ABSTRACT

WAHIDA AMALIA. Development of PISA-LIKE Mathematical Problems on The Change and Relationship Content to Measure the Mathematical Solution Ability of Middle School Students. Thesis. Medan: Post Graduate Program, State University of Medan, 2020

This study aims to: produce PISA-LIKE math questions on valid and practical Change and Relationship content to measure the mathematical problem-solving ability of junior high school students. This research is a research and development type of formative evaluation Tessmer which consists of two stages namely; (1) preliminary stage, and (2) formative evaluation stage which includes self-evaluation and prototyping. The prototyping stage consists of expert reviews, one-to-one, small groups, and field tests. The subjects of this study were students of grade IX-I junior high school Dr. Wahidin Sudirohusodo, amounting to 36 students.

The results showed that the PISA-LIKE math problem has been developed on quality Change and Relationship content from the validity and practical aspects. Validation is based on the results of validation by experts who state "the problem can be used with a little revision". Practical based on expert judgment, teacher response questionnaire and student response questionnaire. The results of the teacher's questionnaire response of 83.33% were "very positive" to the questions that had been given, while the students' response of 75% was "positive" to the questions that had been given by researchers. Based on the results of data analysis the level of students' mathematical problem-solving abilities of the questions developed was in the "medium" category of 15 students (41.67%).

Keywords: PISA-LIKE mathematical problems, Mathematical Problem Solving, Formative Evaluation, Change and Relationship

