ABSTRAK

**PENGEMBANGAN LKPD BERBASIS *REALISTIC MATHEMATIC
EDUCATION* (RME) UNTUK MENINGKATKAN KEMAMPUAN
KOMUNIKASI MATEMATIS**

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Penelitian ini merupakan penelitian pengembangan yang bertujuan untuk menghasilkan LKPD berbasis pendekatan *Realistic Mathematic Education* (RME) yang memenuhi kriteria valid, praktis dan efektif dalam meningkatkan kemampuan komunikasi matematis. Penelitian dan pengembangan mengacu kepada langkah-langkah model pengembangan 4-D terdiri 4 tahapan utama yaitu: Pendefinisian (*Define*), Perencanaan (*Design*), Pengembangan (*Develop*), Penyebaran (*Disseminate)*. Penelitian dilakukan di SMAN 2 Natar kelas X Semester genap tahun pelajaran 2022/2023. Deskripsi penelitian pengembangan yang digunakan adalah *pre-post control group design.* Teknik pengumpulan data pada penelitian ini meliputi wawancara, observasi, lembar angket, dan tes kemampuan komunikasi matematis. Teknik analisis yang digunakan adalah statistik deskripsi dan *uji-t*. Berdasarkan analisis data hasil validasi ahli media dan materi didapat rerata 84,6% dan 89,85% dengan kriteria sangat valid, serta tanggapan guru dan siswa tentang kepraktisan LKPD berbasis RME diperoleh skor 93,2% dan 90,65% dengan kriteria sangat praktis. Berdasarkan hasil *uji-t* terhadap peningkatan (*N-gain*) kemampuan komunikasi matematis 0.00001 < 0.005, sehingga LKPD berbasis *Realistic Mathematic Education* (RME) efektif meningkatkan kemampuan komunikasi matematis. Jadi dapat disimpulkan bahawa LKPD berbasis *Realistic Mathematic Education* (RME) memenuhi kritria valid, praktis dan efektif untuk meningkatkan kemampuan komunikasi matematis.

Kata Kunci: Lembar Kerja Peserta Didik (LKPD), Pendekatan RME, Kemampuan Komunikasi Matematis.

ABSTRACT

DEVELOPMENT STUDENT WORKSHEETS BASED ON REALISTIC MATHEMATIC EDUCATION (RME) TO IMPROVE MATHEMATICAL COMMUNICATION ABILITY

By

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This research is a development research that aims to LKPD products based on the Realistic Mathematical Education (RME) approach that meet valid, practical and effective criteria in improving mathematical communication skills. Research and development refers to the steps of the 4-D development model consisting of 4 main stages, namely: Define, Design, Develop, Disseminate. The research was conducted at SMAN 2 Natar class X even semester of the 2022/2023 academic year. The description of the development research used was the pre-post control group design. Data collection techniques in this study included interviews, observation, questionnaires, and tests of mathematical communication skills. The analysis technique used is descriptive statistics and t-test. Based on the analysis of data from media and material expert validation results, the average value was 84.6% and 89.85% with very valid criteria, as well as teacher and student responses regarding the practicality of RME-based LKPD obtained scores of 93.2% and 90.65% with very practical criteria. Based on the results of the t-test on increasing (N-gain) mathematical communication skills $0.00001 < 0.005$, so that LKPD based on Realistic Mathematics Education (RME) is effective in improving mathematical communication skills. So it can be concluded that LKPD based on Realistic Mathematics Education (RME) meets valid, practical and effective criteria for improving mathematical communication skills.

Keyword: Based Student Worksheets, RME Approach, Improve Mathematical Communication Ability.