

ABSTRAK

PENGEMBANGAN DESAIN PEMBELAJARAN BERBASIS MODEL *INQUIRY* DENGAN PENDEKATAN *REALISTIC MATHEMATICS EDUCATION* (RME) UNTUK MENINGKATKAN KEMAMPUAN BERPIKIR KRITIS

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Penelitian ini bertujuan untuk mengembangkan desain pembelajaran matematika berbasis model *Inquiry* dengan pendekatan *Realistic Mathematics Education* (RME) pada siswa kelas IV SD. Metode penelitian yang digunakan adalah *Research and Development* (R&D) dengan model pengembangan Borg and Gall yang dari sepuluh langkah pengembangan namun dalam penelitian ini disesuaikan menjadi tujuh langkah. Sampel penelitian ini terdiri dari 26 siswa kelas IV SDN 55 Gedong Tataan sebagai kelas kontrol dan kelas eksperimen. Uji praktikalitas kelompok kecil bertempat di SDN 19 Gedong Tataan, sedangkan uji validitas dan reliabilitas soal bertempat di SDN 58 Gedong Tataan. Data dikumpulkan melalui observasi, angket validasi, tes, dan dokumentasi, kemudian dianalisis secara kuantitatif dan kualitatif. Hasil validasi ahli menunjukkan bahwa desain pembelajaran matematika berbasis model *Inquiry* dengan pendekatan *Realistic Mathematics Education* (RME) memenuhi kriteria kevalidan pada desain pembelajaran, modul ajar, LKPD dan soal tes. Uji coba lapangan menunjukkan peningkatan signifikan dalam kemampuan berpikir kritis peserta didik, dengan hasil uji *n-Gain* yang memperoleh kriteria sedang. Hasil uji *t* memenuhi kriteria bahwa terdapat perbedaan yang signifikan antara nilai *pretest* (sebelum menggunakan desain pembelajaran matematika berbasis model *Inquiry* dengan pendekatan *Realistic Mathematics Education* (RME) dan *posttest* (setelah menggunakan desain pembelajaran matematika berbasis model *Inquiry* dengan pendekatan *Realistic Mathematics Education* (RME)).

Kata kunci: desain, model *inquiry*, pendekatan RME, berpikir kritis

ABSTRACT

DEVELOPMENT OF A LEARNING DESIGN BASED ON THE INQUIRY MODEL WITH A REALISTIC MATHEMATICS EDUCATION (RME) APPROACH TO ENHANCE CRITICAL THINKING SKILLS

By

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This study aims to develop a mathematics learning design based on the Inquiry model using the Realistic Mathematics Education (RME) approach for fourth-grade elementary school students. The research method employed is Research and Development (R&D), adopting the Borg and Gall development model. Although originally comprising ten stages, it was adapted to seven stages for this study. The research sample consisted of 26 fourth-grade students from SDN 55 Gedong Tataan, divided into control and experimental classes. A small-group practicality test was conducted at SDN 19 Gedong Tataan, while the validity and reliability tests were carried out at SDN 58 Gedong Tataan. Data were collected through observation, validation questionnaires, tests, and documentation, and were analyzed both quantitatively and qualitatively. The results of expert validation indicate that the mathematics learning design based on the Inquiry model with the *Realistic Mathematics Education* (RME) approach meets the validity criteria: the learning design, the teaching module, the student worksheet (LKPD), and the test questions. The field trial showed a significant improvement in students' critical thinking skills, with the n-Gain test yielding, classified as moderate. The t-test results indicating a significant difference between the pretest (before using the learning design) and the posttest (after using the learning design).

Keywords: design, inquiry model, Realistic Mathematics Education (RME), critical thinking