

ABSTRAK

Ema Febrianti Purba: Pengaruh Pendekatan *Realistic Mathematics Education* (RME) Berbantuan Media GeoGebra Terhadap Kemampuan Berpikir Kreatif Matematis Siswa. **Program Studi Pendidikan Matematika FKIP Universitas Malikussaleh.**

Kemampuan berpikir kreatif matematis siswa pada materi transformasi geometri, khususnya refleksi, perlu dikembangkan melalui proses pembelajaran yang memberikan kesempatan kepada siswa untuk aktif mengeksplorasi ide dan didukung oleh media pembelajaran yang mampu memvisualisasikan konsep matematika secara konkret. Akibatnya, siswa mengalami kesulitan dalam memahami konsep refleksi dan mengembangkan ide-ide kreatif dalam menyelesaikan permasalahan matematika. Oleh karena itu, diperlukan suatu pendekatan pembelajaran yang mampu mengaitkan konsep matematika dengan situasi nyata serta didukung oleh media yang dapat membantu visualisasi konsep secara interaktif, yaitu pendekatan *Realistic Mathematics Education* (RME) berbantuan media GeoGebra. Penelitian ini bertujuan untuk mengetahui pengaruh pendekatan *Realistic Mathematics Education* (RME) berbantuan media GeoGebra terhadap kemampuan berpikir kreatif matematis siswa. Penelitian ini merupakan penelitian kuantitatif dengan jenis penelitian *quasi experiment*. Desain penelitian yang digunakan adalah *Nonequivalent Control Group Design*. Populasi dalam penelitian ini adalah seluruh siswa kelas IX MTsN 1 Bireuen Tahun Ajaran 2025/2026. Sampel penelitian terdiri atas kelas IX.2 sebagai kelas eksperimen dan kelas IX.1 sebagai kelas kontrol yang dipilih menggunakan teknik *purposive sampling*. Instrumen pengumpulan data berupa tes kemampuan berpikir kreatif matematis yang diberikan sebelum (*pretest*) dan sesudah (*posttest*) perlakuan. Berdasarkan hasil pengujian hipotesis menggunakan uji *Mann-Whitney U*, diperoleh nilai *Asymp. Sig. (2-tailed)* sebesar $0,001 < 0,05$. Dengan demikian, dapat disimpulkan bahwa terdapat pengaruh yang signifikan dari pendekatan *Realistic Mathematics Education* (RME) berbantuan media GeoGebra terhadap kemampuan berpikir kreatif matematis siswa. Kemampuan berpikir kreatif matematis siswa yang memperoleh pembelajaran menggunakan pendekatan *Realistic Mathematics Education* (RME) berbantuan media GeoGebra lebih baik dibandingkan dengan siswa yang memperoleh pembelajaran konvensional pada materi transformasi geometri, khususnya refleksi.

Kata kunci: *Realistic Mathematics Education* (RME), GeoGebra, kemampuan berpikir kreatif matematis, refleksi.

ABSTRACT

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Students' mathematical creative thinking ability in the topic of geometric transformations, particularly reflection, needs to be developed through a learning process that provides students with opportunities to actively explore ideas and is supported by instructional media capable of visualising mathematical concepts concretely. As a result, students experience difficulties in understanding the concept of reflection and developing creative ideas in solving mathematical problems. Therefore, a learning approach that is able to relate mathematical concepts to real-life situations and is supported by media that facilitate interactive visualisation of concepts is required, namely the Realistic Mathematics Education (RME) approach assisted by GeoGebra. This study aims to examine the effect of the Realistic Mathematics Education (RME) approach assisted by GeoGebra on students' mathematical creative thinking ability. This study employed a quantitative approach using a quasi-experimental research design. The research design used was the Nonequivalent Control Group Design. The population of this study consisted of all Grade IX students of MTsN 1 Bireuen in the 2025/2026 academic year. The sample consisted of Class IX.2 as the experimental group and Class IX.1 as the control group, selected using purposive sampling. The data were collected using a mathematical creative thinking ability test administered before (pre-test) and after (post-test) the treatment. Based on the results of hypothesis testing using the Mann–Whitney U test, the Asymp. Sig. (2-tailed) value was 0.001, which was lower than 0.05. Therefore, it can be concluded that the Realistic Mathematics Education (RME) approach assisted by GeoGebra has a significant effect on students' mathematical creative thinking ability. Students who were taught using the Realistic Mathematics Education (RME) approach assisted by GeoGebra demonstrated better mathematical creative thinking ability than those who received conventional instruction on the topic of geometric transformations, particularly reflection.

Keywords: *Realistic Mathematics Education (RME), GeoGebra, mathematical creative thinking skills, reflection.*