

**PENGARUH PENERAPAN MODEL PEMBELAJARAN DISKURSUS
MULTI REPRESENTASI (DMR) BERORIENTASI MASALAH
KONTEKSTUAL TERHADAP KEMAMPUAN KOMUNIKASI
MATEMATIS SISWA KELAS VIII SMP NEGERI 2 MANGGIS**

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ABSTRAK

Penelitian ini merupakan penelitian eksperimen semu dengan *post-test only control group design* yang memiliki tujuan untuk mengetahui pengaruh penerapan model pembelajaran Diskursus Multi Representasi (DMR) berorientasi masalah kontekstual terhadap kemampuan komunikasi matematis siswa kelas VIII SMP Negeri 2 Manggis, Kabupaten Karangasem, Provinsi Bali. Populasi penelitian ini adalah seluruh siswa kelas VIII SMP Negeri 2 Manggis semester genap tahun ajaran 2021/2022. Sampel penelitian yang dipilih terdiri atas 2 kelas, yaitu kelas VIII A dan kelas VIII B yang diperoleh melalui teknik *cluster random sampling*. Melalui pengundian, terpilih kelas VIII A sebanyak 31 siswa sebagai kelas eksperimen dan kelas VIII B sebanyak 31 siswa sebagai kelas kontrol. Instrumen penelitian berupa tes uraian. Tes yang digunakan telah memenuhi kriteria valid dan reliabel dengan koefisien validitas dan reliabilitas, yaitu 1,00 dan 0,772. Data skor kemampuan komunikasi matematis siswa dianalisis dengan statistik uji-t (*one-tailed independent samples t-test*) pada taraf signifikansi 5% dan diperoleh bahwa kemampuan komunikasi matematis siswa yang dibelajarkan dengan model pembelajaran DMR berorientasi masalah kontekstual lebih baik daripada kemampuan komunikasi matematis siswa yang dibelajarkan dengan model pembelajaran konvensional ($t_{hitung} > t_{tabel}$ ($2,282 > 1,671$)). Jadi, dapat disimpulkan bahwa penerapan model pembelajaran DMR berorientasi masalah kontekstual dapat dijadikan alternatif solusi untuk meningkatkan kemampuan komunikasi matematis siswa.

Kata kunci: Model Diskursus Multi Representasi, Masalah Kontekstual, Kemampuan Komunikasi Matematis

THE EFFECT OF APPLICATION OF THE CONTEXTUAL PROBLEM-ORIENTED MULTI-REPRESENTATIONAL DISCOURSE LEARNING MODEL (DMR) ON THE MATHEMATICAL COMMUNICATION SKILLS OF STUDENTS CLASS VIII SMP NEGERI 2 MANGGIS

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ABSTRACT

This research is a quasi-experiment with a post-test only control group design which aims to determine the effect of the contextual problem-oriented Multi-Representation Discourse (DMR) learning model on mathematical communication skills of students class VIII SMP Negeri 2 Manggis, District of Karangasem, Province of Bali. The population of this study were all students of class VIII at SMP Negeri 2 Manggis in the even semester of the 2021/2022 academic year. The sample selected consisted of 2 classes, namely VIII A class and VIII B class which determined by a cluster random sampling techniques. Through the lottery, 31 students were selected for class VIII A as an experiment class and class VIII B with 31 students as a control class. The research instruments in the form of a description tests. The test used has met the valid and reliable criteria with the validity and reliability coefficients of 1,00 and 0,772. The results of the students' mathematical communication skills data were analyzed with t-test statistics (one-tailed independent samples t-test) at a significance level of 5% and was obtained that the mathematical communication skills of students who were taught using the contextual problem-oriented DMR learning model were better than the mathematical communication skills of students who were taught using the conventional learning models ($t_{value} > t_{table} (2,282 > 1,671)$). So, it can be concluded that the application of the contextual problem-oriented DMR learning models can be used as an alternative solution to improve students' mathematical communication skills.

Key word: multi-representational discourse model, contextual problem, mathematical communication skills