

**PENGARUH PEMBELAJARAN KOOPERATIF MIND MAPPING  
TERHADAP PENINGKATAN KEMAMPUAN BERPIKIR KRITIS DAN  
KREATIF MATEMATIS SISWA**

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**ABSTRAK**

Penelitian ini merupakan penelitian kuasi eksperimen yang bertujuan untuk menelaah perbedaan peningkatan kemampuan berpikir kritis dan kreatif matematis antara siswa yang memperoleh pembelajaran kooperatif *mind mapping* dengan siswa yang memperoleh pembelajaran langsung. Selain itu diungkap pula sikap siswa terhadap pembelajaran matematika melalui pembelajaran kooperatif *mind mapping*. Desain penelitiannya adalah eksperimen kelompok kontrol pretest-postes dengan populasi seluruh siswa SMPN 5 Cianjur dan sampel siswa kelas VIII yang dipilih 2 kelas secara *purposive sampling*, satu kelas sebagai kelas eksperimen dan yang lain sebagai kelas kontrol. Kelas eksperimen memperoleh pembelajaran kooperatif *mind mapping* sedangkan kelas kontrol memperoleh pembelajaran langsung. Pengumpulan data hasil penelitian menggunakan instrumen berupa soal-soal tes kemampuan berpikir kritis dan kreatif matematis yang dianalisis secara kuantitatif. Data hasil angket skala sikap, observasi aktivitas siswa, wawancara dan angket guru dianalisis secara kualitatif. Hasil penelitian menunjukkan bahwa pembelajaran kooperatif *mind mapping* dapat meningkatkan kemampuan berpikir kritis dan kreatif matematis siswa yang lebih baik dari pembelajaran langsung. Analisis data angket skala sikap siswa, observasi aktivitas siswa dan wawancara memperlihatkan bahwa siswa bersikap positif terhadap pembelajaran matematika, baik terhadap pembelajaran matematika, pembelajaran kooperatif *mind mapping* maupun terhadap soal-soal berpikir kritis dan kreatif matematis siswa.

**Kata Kunci:** pembelajaran kooperatif *mind mapping*, kemampuan berpikir kritis matematis, kemampuan berpikir kreatif matematis.

# **The Effect of Mind Mapping Cooperative Learning on the Improvement of Students' Critical and Creative Mathematical Thinking Skills**

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## **ABSTRACT**

This quasi-experimental study aims to investigate differences in the improvement of critical and creative mathematical thinking skills among students taught using mind mapping cooperative learning compared to those taught using direct instruction. Additionally, this research also reveals students' attitudes toward learning mathematics through mind mapping cooperative learning. With the entire student population in SMPN 5 Cianjur, this study employs the pretest-posttest control group experimental research design using the sample of eighth grade students. Incorporating the purposive sampling techniques, two classes were selected; one as the experimental class and the other as the control class. In this study, the experimental class participated in mind mapping cooperative learning while the control class were taught using the direct teaching. Data were collected using the instruments in the form of test items for measuring critical and creative mathematical thinking skills, a questionnaire for students' attitude, observations on student activities a teacher-questionnaire, and interviews with the teachers. Quantitative analyses were carried out for the test results and qualitative analyses were applied for the questionnaires, observations, and interviews results. The results show that using mind mapping cooperative learning can improve students' ability to think critically and creatively in mathematics better than using the direct instruction. The analyses of student attitude-scale questionnaire, observation on student activities, teacher-questionnaire, and teacher-interviews indicate that in general the students reflect positive attitudes towards learning mathematics. In particular, they showed positive attitudes towards the mind mapping cooperative learning as well as towards the mathematical test-items for students' critical and creative thinking.

