

Kemampuan Berpikir Kreatif Matematis
melalui *Problem-Based Learning* "What's Another Way" dan *Discovery Learning* Berdasarkan
Adversity Quotient
(Studi Eksperimen pada Satu SMP Negeri di Kabupaten Pekalongan)

ABSTRAK

Penelitian ini dilatarbelakangi oleh pengembangan kemampuan berpikir kreatif matematis siswa yang belum optimal. Berdasarkan kajian pustaka dan penelitian sebelumnya, diprediksi *problem-based learning* "what's another way" dan *discovery learning* dapat meningkatkan kemampuan berpikir kreatif matematis siswa. Penelitian ini bertujuan untuk mengkaji: (1) perbedaan pencapaian dan peningkatan kemampuan berpikir kreatif matematis antara siswa yang belajar melalui *problem-based learning* "what's another way" dengan siswa yang belajar melalui *discovery learning*; (2) perbedaan peningkatan kemampuan berpikir kreatif matematis siswa yang belajar melalui *problem-based learning* "what's another way" apabila berdasarkan *adversity quotient*; (3) perbedaan peningkatan kemampuan berpikir kreatif matematis siswa yang belajar melalui *discovery learning*; (4) perbedaan peningkatan kemampuan berpikir kreatif matematis siswa yang belajar melalui *problem-based learning* "what's another way" dengan siswa yang belajar melalui *discovery learning* apabila berdasarkan masing-masing *adversity quotient* dan (5) aktivitas siswa pada saat proses pembelajaran melalui *problem-based learning* "what's another way" dan *discovery learning*. Penelitian ini adalah kuasi eksperimen melalui *problem based learning* "what's another way" dan *discovery learning*. Populasi penelitian ini seluruh siswa kelas VII pada satu SMP di Kabupaten Pekalongan dengan sampel dua kelas. Untuk kepentingan analisis, masing-masing siswa pada kelas penelitian dikategorikan berdasarkan *adversity quotient*. Instrumen penelitian yang digunakan yaitu tes kemampuan berpikir kreatif matematis, skala *adversity response profile* dan lembar observasi. Hasil penelitian menunjukkan tidak terdapat perbedaan pencapaian dan peningkatan kemampuan berpikir kreatif matematis untuk kedua kelas eksperimen. Namun, terdapat perbedaan peningkatan jika berdasarkan *adversity quotient*. Aktivitas siswa secara keseluruhan pada kelas *problem-based learning* "what's another way" maupun kelas *discovery learning* sudah sangat baik.

Kata Kunci: *Problem-Based Learning* "What's Another Way", *Discovery Learning*, Kemampuan Berpikir Kreatif Matematis, dan *Adversity Quotient*.

**Mathematical Creative Thinking Ability
through Problem-Based Learning “What’s Another Way” and Discovery Learning
Based on Adversity Quotient
(An Experimental Study at a State Junior High Schools in Pekalongan Regency)**

ABSTRACT

The students’ mathematical creative thinking ability which were not optimal became the reason for conducting this study. In this circumstance, numerous previous studies indicated that problem-based learning “what’s another way” and discovery learning could improve students’ mathematical creative thinking ability. Therefore, the present study aimed at investigating: (1) the difference between the achievement and the enhancement of the students’ mathematical creative thinking ability in two classes whereby in one class, the students learning through problem-based learning “what’s another way” and in another class, the students learning through discovery learning; (2) the difference in the enhancement of the students’ mathematical creative thinking ability the students learning through problem-based learning “what’s another way” according to adversity quotient; (3) the difference in the enhancement of the students’ mathematical creative thinking ability the students learning through discovery learning according to adversity quotient (4) the difference in the enhancement of the students’ mathematical creative thinking ability between the students learning through problem-based learning “what’s another way” and the students learning through discovery learning based on each student’s adversity quotient and (5) students’ activities during the learning process via problem-based learning “what’s another way” and discovery learning. It was a quasi-experimental research through problem-based learning “what’s another way” and discovery learning. In this case, the population of the study were all seven grade students in a junior high schools in Pekalongan regency with two classes as the sample. Particularly for the purpose of data analysis, each student in two experimental classes was categorized according to the adversity quotient. The data were gathered by employing three research instruments such as aptitude test of mathematical creative thinking ability, scale of adversity response profile, and observation sheet. The results of the study indicated that there was no difference between the achievement and the enhancement of the students’ mathematical creative thinking ability in two experimental classes. Nevertheless, there was a difference in the enhancement of the students’ mathematical creative thinking ability according to adversity quotient. Besides, the overall students’ activities in both the class employing problem-based learning “what’s another way” and the class employing discovery learning had been very good.

Keywords: Problem-Based Learning “What’s Another Way”, Discovery Learning, Mathematical Creative Thinking Ability, and Adversity Quotient.