

**Upaya Meningkatkan Kemampuan Penalaran Matematis dan *Self-efficacy*
Siswa Melalui Penerapan Pembelajaran Berbasis Masalah
dengan Model Kooperatif *MURDER*
di Kelas XII IPS-2 SMAN 115 Jakarta**

SOPWATILLAH

ABSTRAK

Penelitian ini bertujuan untuk meningkatkan kemampuan penalaran matematis dan *self-efficacy* siswa melalui penerapan pembelajaran berbasis masalah dengan model kooperatif *MURDER* di kelas XII IPS-2 SMA Negeri 115 Jakarta. Penelitian ini merupakan penelitian tindakan kelas (*classroom action research*) yang dilaksanakan dalam tiga siklus dan tiap siklus terdiri dari empat tahapan, yaitu perencanaan, pelaksanaan, observasi, dan refleksi. Pada setiap siklus, pembelajaran dilaksanakan dengan menerapkan pembelajaran berbasis masalah dengan model kooperatif *MURDER*. Siswa diberikan tes pada setiap akhir siklus untuk mengukur kemampuan penalaran matematis siswa. Hasil penelitian menunjukkan bahwa pembelajaran matematika melalui penerapan pembelajaran berbasis masalah dengan model kooperatif *MURDER* dapat meningkatkan kemampuan penalaran matematis dan *self-efficacy* siswa. Hal tersebut ditunjukkan dengan adanya peningkatan nilai tes kemampuan penalaran matematis dan skor angket *self-efficacy* subjek penelitian. Berdasarkan hasil tes setiap akhir siklus, masing-masing subjek penelitian mengalami peningkatan kemampuan penalaran matematis. Demikian juga dengan *self-efficacy* keenam subjek penelitian, berdasarkan hasil angket *self-efficacy* pada akhir siklus III, rata-rata skor *self-efficacy* SP1, SP2, SP3, SP4, SP5 dan SP6 mengalami peningkatan namun masih dalam kualifikasi yang sama dengan skor angket *self-efficacy* penelitian pendahuluan yaitu dengan kualifikasi baik.

Kata kunci: Penalaran Matematis, Self-efficacy, Pembelajaran Berbasis Masalah, Kooperatif MURDER.

**The Efforts to Improve the Student's Ability of Mathematical Reasoning
and *Self-efficacy* Through the Application of Problem Based Learning
Using *MURDER* Cooperative Model in the Twelfth Grade of Social
Class Two at SMAN 115 Jakarta.**

SOPWATILLAH

ABSTRACT

The aim of the research is to improve the ability of mathematical reasoning and *self-efficacy* of the students through the application of *problem-based learning* using *MURDER* cooperative model in the Twelfth grade of Social class two at SMA Negeri 115 Jakarta. This research was a *classroom action research* conducted in three cycles and each cycle consists of four stages, namely *planning, action, observation, and reflection*. In each cycle, learning was implemented by applying *problem based learning* with cooperative *MURDER* model. Students were given a test at the end of each cycle to measure their mathematical reasoning abilities. The results showed that learning mathematics through the application of *problem-based learning* with *MURDER* cooperative model can improve students' mathematical reasoning and *self-efficacy*. This is indicated by an increase in the score of mathematical reasoning and *self-efficacy* questionnaires. Based on the test results at the end of each cycle, every research subject has increased the ability of mathematical reasoning. Similarly with the *self-efficacy* of the six research subjects, based on the *self-efficacy* questionnaire at the end of cycle III, the mean *self-efficacy* score of SP1, SP2, SP3, SP4, SP5 and SP6 has increased but still in the same qualification as the questionnaire for *self-efficacy* score of preliminary research that is with a good qualification.

Keywords: Mathematical reasoning, Self-efficacy, Problem Based Learning, Cooperative MURDER.