

## **ABSTRAK**

Mamut, Emilia 2020, *Pengaruh Problem Based Learning dan Kemampuan Berpikir Kritis Siswa Terhadap Hasil Belajar Matematika.* Skripsi. Program Studi Pendidikan Matematika. Fakultas Sains dan Teknologi. Universitas PGRI Adi Buana Surabaya, Pembimbing Drs Susilo Hadi, M.Pd.

Kata kunci : Hasil Belajar, PBL ( Problem Based Learning), Kemampuan Berpikir Kritis,dan Relasi dan Fungsi

Penelitian ini bertujuan untuk mengetahui adakah pengaruh problem based learning (PBL) dan kemampuan berpikir kritis terhadap hasil belajar siswa. Jenis penelitian ini adalah kuantitatif. Bentuk desain penelitian yang digunakan adalah *post-test only control group design*. Penelitian ini dilaksanakan di SMA Hang Tuah 4 Surabaya pada tahun ajaran 2020/2021. Pemilihan sampel dilakukan dengan *random sampling*. Sampel pada penelitian ini menggunakan kelas X IPS1 dan X IPS2 dimana sebagai kelas X MIPA1 sebagai kelas eksperimen dan kelas X IPS2 sebagai kelas control. Instrument penelitian berupa *post-test* yang berbentuk 5 tes soal uraian, dengan materi Relasi dan Fungsi dan kemampuan berpikir kritis dinilai dari hasil nilai *post-test*. Uji analisis data yang digunakan pada penelitian menggunakan uji-t. Pengujian hipotesis dilakukan dengan menggunakan taraf signifikansi sebesar 0,05 dengan perolehan  $t_{hitung}$  dan  $t_{tabel}$  hasil pengujian menunjukkan  $t_{hitung}$  sebesar 3,949 dan  $t_{tabel}$  sebesar 1,998 hal ini berarti hasil  $t_{hitung} > t_{tabel}$  dengan  $3,949 > 1,998$  sehingga  $H_0$  dan  $H_1$  diterima hal ini menunjukkan bahwa ada pengaruh antara kelas eksperimen yang diajarkan dengan model problem based leaning dan kelas kontrol yang diajarkan menggunakan model pembelajaran konvensional. Maka dari data diatas dapat disimpulkan bahwa ada pengaruh model *problem based learning* dan kemampuan berpikir kritis terhadap hasil belajar siswa di mana kemampuan berpikir kritis siswa dengan melihat nilai dari tes akhir dan yang memperoleh nilai lebih tinggi berada di kelas eksperimen dibandingkan kelas Kontrol

## ***ABSTRACT***

Mamut, Emiliana 2020 *The Effect of Problem Based Learning and Students' Critical Thinking Ability on Mathematics Learning*. Essay. Mathematics Education Study Program. Faculty of Science and Technology. PGRI Adi Buana University Surabaya, Supervisor Drs Susilo Hadi, M.Pd.

**Keywords:** Learning Outcomes, PBL (*Problem Based Learning*), Critical Thinking Ability, and Relationships and Functions

This study aims to determine whether there is an effect of problem based learning (PBL) and critical thinking skills on student learning outcomes. This type of research is quantitative. The form of research design used was post-test only control group design. This research was conducted at SMA Hang Tuah 4 Surabaya in the 2020/2021 school year. The sample selection is done by random sampling. The sample in this study used class X MIPA1 and X IPS2 where as class X MIPA1 as the experimental class and class X IPS2 as the control class. The research instrument was a post-test in the form of 5 test questions in essay, with the material Relations and Function and critical thinking skills were assessed from the results of the post-test scores. Test data analysis used in the study using the t-test. Hypothesis testing is carried out using a significant level of 0.05 with the acquisition of  $t_{count}$  and  $t_{table}$ , the test results show  $dt\_count$  of 3.949 and  $t_{table}$  of 1.998, this means that the results of  $t_{count} > t_{table}$  with  $3.949 > 1.998$  so that  $H_0$  and  $H_1$  are accepted, this indicates that there is influence between the experimental class who are taught using the problem based leaning model and the control class which is taught using conventional learning models. So from the data above, it can be concluded that there is an effect of the problem-based learning model and the ability to think critically on student learning outcomes where students' critical thinking skills by looking at the scores from the final test and those who get higher scores are in the experimental class than the control class.

