

Putri Septiyawati, 2023. Perbandingan Model *Problem Based Learning* dengan *Discovery Learning* Terhadap Kemampuan Berpikir Kritis Siswa pada Materi *Firewal*. Skripsi. Program Studi Pendidikan Informatika, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura.  
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## ABSTRAK

Penelitian ini bertujuan untuk : (1) Mengetahui pengaruh model *problem based learning* terhadap kemampuan berpikir kritis siswa. (2) Mengetahui pengaruh model *discovery learning* terhadap kemampuan berpikir kritis siswa (3) Mengetahui perbedaan model *problem based learning* dengan *discovery learning* terhadap kemampuan berpikir kritis siswa pada materi *firewall*. Jenis penelitian ini adalah *quasi eksperimen* dengan menggunakan desain *the nonequivalent contrl group design*. Populasi pada penelitian ini yaitu seluruh siswa kelas XII TKJ SMK At-Taufiqiyah yang berjumlah 65 siswa, dan jenis sampel yang digunakan adalah *sampling total/sensus*. Data dikumpulkan dengan menggunakan tes uraian kemampuan berpikir kritis sebanyak 5 soal. Kemampuan berpikir kritis siswa diukur dan dianalisis dengan menggunakan *mann withney test* dan *independent sample T-test* dengan SPSS v.26. Dari hasil penelitian menunjukkan bahwa (1) Hasil uji *mann withney test* diperoleh nilai  $\text{Asymp.sig}(2\text{-tailed}) < 0.05$  ( $0.000 < 0.05$ ) yang berarti terdapat pengaruh PBL terhadap kemampuan berpikir kritis siswa. (2) Hasil uji *mann withney test* diperoleh nilai  $\text{Asymp.sig}(2\text{-tailed}) < 0.05$  ( $0.000 < 0.05$ ) yang berarti terdapat pengaruh DL terhadap kemampuan berpikir kritis siswa. (3) Hasil uji *independent sample T-test* diperoleh nilai  $\text{sig}(2\text{-tailed}) = 0.132$  dengan taraf signifikan = 0.05 yang berarti tidak terdapat perbedaan yang signifikan antara kemampuan berpikir kritis siswa yang diajarkan dengan model PBL dan siswa yang diajarkan dengan model DL.

**Kata kunci :** *Problem Based Learning, Discovery Learning*, Kemampuan berikir kritis

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## **ABSTRACT**

*This study aims to: (1) Determine the effect of the problem based learning model on students' critical thinking skills. (2) Knowing the effect of the discovery learning model on students' critical thinking skills (3) Knowing the differences between problem based learning and discovery learning models on students' critical thinking skills in firewall material. This type of research is quasi-experimental using the nonequivalent control group design. The population in this study were all 65 students of class XII TKJ SMK At-Taufiqiyah, and the type of sample used was total/census sampling. Data was collected using a critical thinking ability description test of 5 questions. Students' critical thinking skills were measured and analyzed using the Mann Withney test and independent sample T-test with SPSS v.26. The results showed that (1) the results of the Mann Withney test obtained  $Asymp.sig(2-tailed) < 0.05$  ( $0.000 < 0.05$ ) which means that there is an effect of PBL on students' critical thinking skills. (2) The results of the Mann Withney test obtained  $Asymp.sig(2-tailed) < 0.05$  ( $0.000 < 0.05$ ) which means that there is an influence of DL on students' critical thinking skills. (3) The results of the independent sample T-test obtained  $sig(2-tailed) = 0.132$  with a significant level = 0.05, which means that there is no significant difference between the critical thinking skills of students taught by the PBL model and students taught by the DL model.*

**Keywords:** Problem Based Learning, Discovery Learning, Critical thinking ability