

Nikmatuz Zuhroh. 2018. *Pengaruh Model Problem Based Learning (PBL) Berbasis Pendekatan Open-ended Terhadap Peningkatan Kemampuan Pemecahan Masalah Siswa*. Skripsi. Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing I: Mochammad Ahied, Pembimbing II: Wiwin Puspita Hadi.

ABSTRAK

Penelitian ini bertujuan untuk meningkatkan kemampuan pemecahan masalah siswa melalui model *problem based learning (PBL)* berbasis pendekatan *open-ended*. Penelitian ini merupakan penelitian pre-eksperimental. Desain penelitian yaitu *one grup pretest and posttest design*. Populasi dalam penelitian ini adalah seluruh siswa kelas VII MTs Masyhudiyah. Sedangkan sampel dalam penelitian ini adalah kelas VII B dengan menggunakan teknik *purposive sampling*. Teknik analisis data yang digunakan adalah uji t sampel berpasangan. Hasil analisis data menunjukkan $t_{hitung} -20,53$ dan $t_{tabel} 1,703$ (pada df 26 dan taraf signifikansi 0,05) maka $t_{hitung} \leq t_{tabel}$. Penelitian ini menunjukkan bahwa penggunaan model *problem based learning (PBL)* berbasis pendekatan *open-ended* berpengaruh terhadap kemampuan pemecahan masalah siswa menggunakan langkah pemecahan masalah Polya. Hal tersebut dapat dilihat berdasarkan rata-rata *pretest* siswa sebelum pembelajaran yaitu 34,81 meningkat pada *posttest* siswa yaitu 72,22. Persentase peningkatan kemampuan pemecahan masalah pada kriteria sedang sebesar 88,89%, dan kriteria tinggi sebesar 11,11%. Keterlaksanaan pembelajaran pada kategori baik dengan persentase sebesar 89,13% serta respon positif siswa terhadap pembelajaran sebesar 80,86% (sangat baik).

Kata kunci: kemampuan pemecahan masalah, model *problem based learning (PBL)*, pendekatan *open-ended*.

Nikmatuz Zuhroh. 2018. *The Influence of Problem Based Learning (PBL) Model Based On Open-ended Approach Toward an Increase In The Ability To Resolve Student Problems*. Thesis. Natural Science Education Study Program, Faculty of Education, University of Trunojoyo Madura. Advisor I: Mochammad Ahied, Advisor II: Wiwin Puspita Hadi.

ABSTRACT

This research aims to improve the ability of student problem solving through learning *problem based learning (PBL)* model based on *open-ended* approach. This type of research is pre experimental research. The research design is one grup pretest and posttest design. The population in this research is the whole grade VII MTs Masyhadiyah. While the sample in this research is class VII B using purposive sampling. Data analysis technique used is paired sample t-test. The result of the data analysis shows $t_{\text{calculate}} -20,53$ and $t_{\text{table}} 1,703$ (on the extent and significance of 26 df 0,05) then $t_{\text{calculate}} \leq t_{\text{table}}$. The research shows that use learning *problem based learning(PBL)* model based on *open-ended* approach influence the ability of student problem solving with Polya strategy. It can be seen on the basis of the average student's pretest before learning is 34,81 increased on posttest students is 72,22. The percentage increase the ability of problem solving on middle criteria is 88,89% and higher criteria is 11,11%. Realizations learning in both categories with percentages of 89,13% as well as positive response toward the student learning of 80,86% (very good).

Keywords: ability of problem solving, *problem based learning(PBL)* model, *open-ended* approach.