

## ABSTRAK

Hadiyanti, Imelda Dwi. 2023. Efektivitas Model Pembelajaran Berbasis *Problem Based Learning* (PBL) untuk Meningkatkan Kemampuan Berpikir Kritis dan Keterampilan Proses Sains di SMKN 5 Jember. Skripsi, Program Studi Pendidikan Biologi, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Muhammadiyah Jember. Pembimbing: (1) Dra. Sawitri Komarayanti, M.P. (2) Ika Priantari, S.Si., M. Pd.

**Kata Kunci :** Berpikir kritis, Keterampilan proses sains, PBL

Penelitian ini bertujuan untuk mengetahui efektivitas model pembelajaran berbasis *problem based learning* untuk meningkatkan kemampuan berpikir kritis dan keterampilan proses sains di SMKN 5 Jember.

Penelitian ini dilakukan di SMKN 5 Jember. Penelitian ini merupakan penelitian kuantitatif. Rancangan penelitian yang digunakan yaitu penelitian *quasi experiment*. Instrument yang digunakan dalam penelitian ini meliputi lembar tes dan lembar observasi.

Berdasarkan hasil penelitian terdapat perbedaan nilai posttest dan pretest sebelum dan sesudah diberikan perlakuan. Hal ini dapat disimpulkan bahwa uji coba pembelajaran menggunakan model pembelajaran problem based learning dapat meningkatkan kemampuan berpikir kritis dan keterampilan proses sains, hal ini dapat dibuktikan dengan hasil uji T dimana didapatkan hasil nilai signifikansi yaitu sebesar 0,00. Karena nilai signifikansi  $0,00 < 0,05$  maka dapat disimpulkan Hipotesis diterima ( $H_0$ ) diterima dengan kesimpulan yaitu ada pengaruh penggunaan perangkat pembelajaran berbasis PBL pada kemampuan berpikir kritis. Temuan pada hasil penelitian keterampilan proses sains siswa di SMKN 5 Jember tergolong dalam kriteria sangat baik, hal ini dibuktikan dengan hasil persentase sebesar 93% dengan rincian persentase tiap indikator pada tabel.

## ABSTRACT

Hadiyanti, Imelda Dwi. 2023. The Effectiveness of Problem Based Learning (PBL) Based Learning Models to Improve Critical Thinking Ability and Science Process Skills at SMKN 5 Jember..Thesis, Biology Education Study Program, Faculty of Teacher Training and Educational Science.Universitas Muhammadiyah Jember. Pembimbing: (1) Dra. Sawitri Komarayanti, M.P. (2) Ika Priantri, S.Si., M. Pd.

**Keyword :** Critical thinking, Science process skills, PBL

This study aims to determine the effectiveness of problem based learning based learning models to improve critical thinking skills and science process skills at SMKN 5 Jember.

This research was conducted at SMKN 5 Jember. This research is a quantitative research. The research design used is quasi-experimental research. The instruments used in this study include test sheets and observation sheets.

Based on the results of the study there were differences in posttest and pretest scores before and after being given treatment. It can be concluded that learning trials using problem based learning learning models can improve critical thinking skills and science process skills, this can be proven by the results of the T test where the results obtained a significance value of 0.00. Because the significance value is  $0.00 < 0.05$ , it can be concluded that the accepted hypothesis ( $H_0$ ) is accepted with the conclusion that there is an effect of using PBL-based learning tools on critical thinking skills. The findings on the research results of students' science process skills at SMKN 5 Jember are classified as very good, this is evidenced by a percentage of 93% with a breakdown of the percentage of each indicator in the table.