

ABSTRAK

Zakiyah Choerul Ummah. 2024. **PENGARUH MODEL PEMBELAJARAN *PROBLEM BASED INSTRUCTION* (PBI) BERBANTUAN LKPD TERHADAP KEMAMPUAN PEMECAHAN MASALAH SISWA PADA MATERI PENCEMARAN LINGKUNGAN**

Penelitian ini dilatarbelakangi dari hasil asesmen diagnostik kemampuan pemecahan masalah pada materi pencemaran lingkungan dengan rata-rata persentase 15,32 % dengan kategori sangat rendah. Upaya yang dilakukan untuk mengatasi permasalahan tersebut dengan menerapkan model pembelajaran *Problem Based Instruction* (PBI) berbantuan LKPD. Tujuan penelitian ini adalah untuk mengetahui pengaruh model pembelajaran *Problem Based Instruction* (PBI) berbantuan LKPD terhadap kemampuan pemecahan masalah siswa pada materi pencemaran lingkungan di kelas X fase E SMA Negeri 5 Tasikmalaya tahun ajaran 2023/2024. Metode penelitian yang digunakan adalah *quasi eksperiment* dengan desain penelitian *Posttest only control group design*. Sampel penelitian diambil dengan menggunakan teknik *cluster random sampling* sebanyak 2 kelas. Pengukuran kemampuan pemecahan masalah peserta didik menggunakan tes yang diberikan setelah siswa mendapatkan perlakuan (*posttest*) berbentuk esai dengan jumlah soal 5 butir soal. Teknik analisis data menggunakan uji prasyarat (uji normalitas, uji homogenitas) dan uji hipotesis (uji t). Hasil uji hipotesis menggunakan uji t pada taraf signifikansi ($\alpha = 0,05$) menunjukkan bahwa setelah diterapkan model pembelajaran *Problem Based Instruction* (PBI) diperoleh $t_{hitung} > t_{tabel} = 2,28 > 1,67$ sehingga H_a diterima dan H_0 ditolak. Artinya pada taraf kepercayaan 95% dapat disimpulkan bahwa ada pengaruh model pembelajaran *Problem Based Instruction* (PBI) terhadap kemampuan pemecahan masalah siswa pada materi pencemaran lingkungan di kelas X fase E SMA Negeri 5 Tasikmalaya tahun ajaran 2023/2024. Pembelajaran dengan model *Problem Based Instruction* (PBI) berbantuan LKPD melibatkan peserta didik untuk aktif dalam memecahkan masalah, mampu berkolaborasi dan dapat mengeksplorasi berbagai solusi serta meningkatkan pemahaman dan keterampilan sosial dalam memecahkan masalah. Implikasi penelitian ini memberikan rekomendasi untuk para pendidik dalam memilih, menemukan, merancang dan menerapkan pembelajaran yang tepat, efektif dan efisien guna meningkatkan kemampuan pemecahan masalah peserta didik.

Kata kunci: Kemampuan Pemecahan Masalah, LKPD, Pencemaran Lingkungan, *Problem Based Instruction* (PBI).

ABSTRACT

Zakiyah Choerul Ummah. 2024. ***THE EFFECT OF PROBLEM BASED INSTRUCTION (PBI) LEARNING MODEL ASSISTED BY LKPD ON STUDENTS' PROBLEM SOLVING ABILITY ON ENVIRONMENTAL POLLUTION***

This research was motivated by the results of a diagnostic assessment of problem solving abilities on environmental pollution material with an average percentage of 15,32% in the very low category. Efforts were made by researchers to overcome this problem by implementing the Problem Based Instruction (PBI) learning model assisted by LKPD. The aim of this research is to determine the effect of the Problem Based Instruction (PBI) assisted by LKPD on students' problem solving abilities in environmental pollution material in class X phase E of SMA Negeri 5 Tasikmalaya in the 2023/2024 academic year. The research method used was quasi-experimental with a posttest only control group design. The research sample was taken using cluster random sampling technique for 2 classes. Students' problem solving abilities were measured using a test given after students received treatment (posttest) in the form of an essay with a total of 5 questions. The data analysis technique uses prerequisite tests (normality test, homogeneity test) and hypothesis testing (t test). The results of hypothesis testing using the t test at the significance level ($\alpha = 0,05$) show that after applying the Problem Based Instruction (PBI) learning model, $t_{hitung} > t_{tabel} = 2,28 > 1,67$ so that H_a accepted and H_0 is rejected. This means that at the 95% confidence level it can be concluded that there is an influence of the Problem Based Instruction (PBI) learning model on students' problem solving abilities in environmental pollution material in class X phase E of SMA Negeri 5 Tasikmalaya in the 2023/2024 academic year. Learning with the Problem Based Instruction (PBI) model assisted by LKPD involves students to be active in solving problems, able to collaborate and explore various solutions and increase understanding and social skills in solving problems. The implications of this research provide recommendations for educators in selecting, finding, designing and implementing appropriate, effective and efficient learning to improve students' problem solving abilities.

Keywords: *Problem solving Ability, LKPD, Environmental Pollution, Problem Based Instruction (PBI)*