

ABSTRAK

PENGARUH MODEL *PROBLEM BASED LEARNING* BERBANTU MODUL DIGITAL TERHADAP KEMAMPUAN LITERASI SAINS PESERTA DIDIK PADA MATERI PENCEMARAN LINGKUNGAN

Oleh

AJENG AMBAR KUSUMA

Penelitian ini bertujuan untuk menganalisis pengaruh model *Problem Based Learning* berbantu modul digital terhadap kemampuan literasi sains peserta didik pada materi pencemaran lingkungan. Penelitian dilaksanakan pada semester ganjil di SMP Negeri 1 Natar. Desain penelitian yang digunakan yaitu quasi eksperimen dengan teknik *Pretest-Posttest Control Group Design*. Sampel diambil menggunakan teknik *Purposive sampling*. Jenis data berupa data kuantitatif dan kualitatif. Data diperoleh melalui tes dan angket. Hasil nilai *pretest-posttest* pada kelas eksperimen yang menggunakan model *Problem Based Learning* mendapat skor nilai *N-gain* sebesar 0,54 kriteria “sedang” dan diperoleh hasil uji normalitas *N-gain* pada kelas eksperimen sebesar $Sig\ 0,100 > 0,05$ dan pada kelas kontrol sebesar $Sig\ 0,200 > 0,05$. Uji homogenitas *N-gain* sebesar $Sig\ 0,443 > 0,05$. Uji hipotesis menggunakan *Independent Sample t-test* didapatkan nilai $Sig\ (2-tailed)\ 0,000 < 0,05$, serta hasil uji Effect size sebesar 1,603. Hasil data angket tanggapan peserta didik terhadap model *Problem Based Learning* berbantu modul digital sebesar 93,1%. Berdasarkan hasil tersebut, dapat disimpulkan bahwa terdapat pengaruh yang signifikan model *Problem Based Learning* berbantu modul digital terhadap kemampuan literasi sains peserta didik pada materi pencemaran lingkungan.

Kata kunci: literasi sains, modul digital, pencemaran lingkungan, *Problem Based Learning*

ABSTRACT

THE EFFECT OF THE PROBLEM BASED LEARNING MODEL AS A DIGITAL MODULE OF THE SCIENCE OF THE SCIENCE OF LEARNERS IN ENVIRONMENTAL POLLUTION MATERIAL

By

AJENG AMBAR KUSUMA

This study aims to analyze the effect of the Problem Based Learning model as a digital module of the module of the science of literacy of learners in environmental pollution materials. The research was conducted in the odd semester in SMP Negeri 1 Natar. The research design used is quasi experiment with pretest-posttest control group design technique. Samples were taken using purposive sampling technique. Data types are quantitative and qualitative data. Data obtained through tests and questionnaires. The pretest-posttest value in the experimental class using the Problem Based Learning model received a score of a N-Gain value of 0.54 "moderate" criteria and obtained the nom-nainst test result in the experimental class of $Sig\ 0.100 > 0.05$ and in the control class of $SIG\ 0.200 > 0.05$. N-gain homogeneity test of $Sig\ 0.443 > 0.05$. The hypothesis test used Independent Sample t-test obtained a 1-tailed value of $0.000 < 0.05$, as well as the effect of the Effect size of 1.603. The results of questionnaire of studying learners against the Problem Based Learning model handled by digital module of 93.1%. Based on these results, it can be concluded that there is a significant effect of model based learning model as a digital module of the level of science literacy students in environmental pollution material.

Keywords: literacy science, digital module, environmental pollution, problem based learning