

ABSTRAK

PENGARUH MODEL *PROBLEM BASED LEARNING* BERMUATAN *SOCIO-SCIENTIFIC ISSUES* TERHADAP LITERASI SAINS PESERTA DIDIK KELAS VII SMPN 28 BANDAR LAMPUNG

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Penelitian ini bertujuan untuk mengetahui pengaruh model *problem based learning* bermuatan *socio-scientific issues* terhadap literasi sains peserta didik kelas VII di SMPN 28 Bandar Lampung. Penelitian ini menggunakan desain *quasi experiment* dengan teknik *pretest posttest non-equivalent control group design*. Sampel diambil melalui teknik *purposive sampling* dengan jumlah 28 peserta didik kelas VII F sebagai kelas eksperimen dan 28 peserta didik kelas VII D sebagai kelas kontrol. Data kemampuan literasi sains diambil melalui *pretest* dan *posttest* sementara data tanggapan peserta didik diperoleh melalui angket. Hasil penelitian menunjukkan bahwa kemampuan literasi sains kelas eksperimen lebih tinggi (*N-gain* 0,65) dan berbeda nyata dibandingkan dengan kelas kontrol (*N-gain* 0,40). Hasil uji *independent sample t-test* didapatkan nilai *sig. (2-tailed)* $0,000 < 0,05$ yang artinya H_0 ditolak dan H_1 diterima. Kemudian, hasil uji *effect size* menunjukkan bahwa *problem based learning* bermuatan *socio-scientific issues* berpengaruh besar dengan kriteria tinggi (2,36). Kemampuan literasi sains tertinggi terdapat pada indikator menjelaskan fenomena secara ilmiah (*N-gain* 0,67) dengan kategori sedang dan terendah pada indikator menafsirkan data dan bukti secara ilmiah (*N-gain* 0,59). Selain itu, hasil uji juga didukung oleh hasil angket yang mendapat tanggapan positif dan diterima oleh peserta didik dengan persentase 85% (hampir semua setuju). Dengan demikian, dapat disimpulkan bahwa penggunaan *problem based learning* bermuatan *socio-scientific issues* berpengaruh terhadap literasi sains peserta didik.

Kata kunci: Literasi Sains, Model *Problem Based Learning*, *Socio-Scientific Issues*

ABSTRACT

THE EFFECT OF PROBLEM BASED LEARNING MODEL CONTAINING SOCIO-SCIENTIFIC ISSUES ON SCIENTIFIC LITERACY OF STUDENTS IN CLASS VII OF SMPN 28 BANDAR LAMPUNG

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This study aims to determine the effect of the problem-based learning model containing socio-scientific issues on the scientific literacy of class VII students at SMPN 28 Bandar Lampung. This study used a quasi-experimental design with a pretest-posttest non-equivalent control group design technique. The sample was taken through a purposive sampling technique with a total of 28 class VII F students as the experimental class and 28 class VII D students as the control class. Data on scientific literacy skills were taken through pretest and posttest while student response data were obtained through a questionnaire. The results of the study showed that the scientific literacy skills of the experimental class were higher (N-gain 0,65) and significantly different compared to the control class (N-gain 0,40). The results of the independent sample t-test obtained a sig. (2-tailed) value of 0,000 < 0,05, which means that H_0 is rejected and H_1 is accepted. Then, the results of the effect size test showed that problem-based learning containing socio-scientific issues had a large effect with high criteria (2,36). The highest scientific literacy ability is in the indicator of explaining phenomena scientifically (N-gain 0,67) with a medium category and the lowest is in the indicator of interpreting data and evidence scientifically (N-gain 0,59). In addition, the test results are also supported by the results of the questionnaire which received positive responses and was accepted by students with a percentage of 85% (almost all agreed). Thus, it can be concluded that the use of problem-based learning containing socio-scientific issues has an effect on students' scientific literacy.

Keywords: *Problem Based Learning Model, Scientific Literacy, Socio-Scientific Issues*