# ABSTRAK

## PENGARUH PENGGUNAAN MODEL *PROBLEM BASED LEARNING* BERBANTUAN *AUGMENTED REALITY* (AR) TERHADAP KEMAMPUAN LITERASI SAINS PESERTA DIDIK KELAS VIII PADA MATERI SISTEM EKSKRESI

**Oleh**

**RICHO ARMAYOGA**

Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan model *problem based learning* berbantuan *Augmented Reality* (AR) terhadap kemampuan literasi sains peserta didik kelas VIII pada materi sistem ekskresi, serta untuk mengetahui tanggapan peserta didik terhadap model PBL berbantuan AR yang digunakan pada materi sistem ekskresi. Sampel penelitian diambil dengan teknik *purposive sampling.* Desain penelitian yang digunakan yaitu *quasi eksperiment* dengan jenis data pada penelitian ini berupa data kuantitatif dan data kualitatif. Instrumen yang digunakan yaitu soal *pre-test* dan *post-test* serta angket tanggapan peserta didik. Hasil penelitian menunjukkan bahwa *N-gain* kemampuan literasi sains peserta didik kelas eksperimen sebesar 0.68, sedangkan kelas kontrol sebesar 0.27. Uji normalitas pada penelitian ini dilakukan menggunakan uji *kolmogrov -smirnov* dengan hasil kelas eksperimen dan kelas kontrol diperoleh nilai taraf signifikansi >0,05, sehingga $H_0$ diterima dan $H_1$ ditolak. Selanjutnya uji homogenitas pada penelitian ini menghasilkan sig. 0,711 > 0,05, berarti $H_1$ diterima. Berikutnya dilakukan uji hipotesis menunjukkan nilai sig. (2-tailed) 0,00 < 0,05, sehingga diperoleh hasil uji bahwa $H_1$ diterima dan $H_0$ ditolak. Kemudian dilakukan uji *Effect Size* yang menunjukan nilai sebesar 0.6 dengan kriteria besar. Sedangkan hasil angket tanggapan peserta didik memperoleh rata rata 89.67% dengan kategori baik sekali. Dengan demikian, dapat disimpulkan bahwa terdapat pengaruh penggunaan model PBL berbantuan AR terhadap kemampuan literasi sains peserta didik kelas VIII pada materi sistem ekskresi.

**Kata Kunci :** AR, kemampuan literasi sains, PBL dan sistem ekskresi

## ABSTRACT

### THE EFFECT OF USING PROBLEM-BASED LEARNING MODEL ASSISTED BY AUGMENTED REALITY (AR) ON STUDENTS' SCIENCE LITERACY SKILLS CLASS VIII ON EXCRETORY SYSTEM MATERIAL

**By**

**RICHO ARMAYOGA**

This study aims to determine the effect of using a problem-based learning model assisted by Augmented Reality (AR) on the science literacy skills of 8th grade students on the material of the excretory system, as well as to determine the students' responses to the AR-assisted PBL model used in the excretory system material. The research sample was taken with purposive sampling technique. The research design used is quasi-experiment with the type of data in this study in the form of quantitative data and qualitative data. The instruments used were pre-test and post-test questions and a questionnaire of students' responses. The results showed that the N-gain of science literacy skills of experimental class students was 0.68, while the control class was 0.27. The normality test in this study was carried out using the Kolmogrov-Smirnov test with the results of the experimental class and control class obtained a significance level value> 0.05, so that H0 was accepted and H1 was rejected. Furthermore, the homogeneity test in this study resulted in sig. 0.711> 0.05, meaning H1 is accepted. Next, the hypothesis test shows the sig value. (2-tailed) 0.00 <0.05, so the test results show that H1 is accepted and H0 is rejected. Then the Effect Size test was carried out which showed a value of 0.6 with large criteria. While the results of the questionnaire responses of students obtained an average of 89.67% with a very good category. Thus, it can be concluded that there is an effect of using the AR-assisted PBL model on the science literacy skills of class VIII students on the material of the excretory system.



**Keywords**: AR, science literacy skills, PBL and excretory system