

## ABSTRAK

**Nyimas Dilviana :** **Pembelajaran Berbasis Masalah (PBM) Berbantuan *Augmented Reality* (AR) pada Materi Sistem Pernapasan untuk Meningkatkan Keterampilan Berpikir Kritis dan Motivasi Belajar Siswa**

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran berbasis masalah (PBM) berbantuan media *augmented reality* (AR) pada materi sistem pernapasan untuk meningkatkan keterampilan berpikir kritis dan motivasi belajar siswa. Penelitian dilakukan di kelas XI IPA MAN 2 Garut dengan menggunakan metode kuasi eksperimen dan desain *nonequivalent control group design*. Kelas eksperimen menerapkan model PBM berbantuan AR, sedangkan kelas kontrol menggunakan pendekatan saintifik (5M). Instrumen yang digunakan meliputi lembar observasi, tes berpikir kritis, dan angket motivasi belajar. Hasil penelitian menunjukkan bahwa keterlaksanaan pembelajaran PBM berbantuan AR mencapai rata-rata 94,74% (sangat baik). Rata-rata N-Gain berpikir kritis siswa kelas eksperimen sebesar 0,61 (kategori sedang), lebih tinggi dibandingkan kelas kontrol sebesar 0,37 (kategori sedang). Hasil uji-t menunjukkan perbedaan signifikan antara kedua kelas (Sig. 0,000 < 0,05). Rata-rata motivasi belajar siswa kelas eksperimen sebesar 85,50 (kategori sangat tinggi), lebih tinggi dibandingkan kelas kontrol sebesar 73,75 (kategori tinggi). Dengan demikian, pembelajaran PBM berbantuan AR terbukti efektif dalam meningkatkan keterampilan berpikir kritis dan motivasi belajar siswa secara signifikan.

**Kata Kunci:** *Augmented Reality*, Berpikir Kritis, Motivasi Belajar, Pembelajaran Berbasis Masalah, Sistem Pernapasan

## ABSTRACT

**Nyimas Dilviana: The Influence Of The CIRC Learning Model (Cooperative Integrated Reading And Composition) Assisted Mind Mapping Media On Students' Cognitive Learning Results On The Materials Of The Body Defense System**

**Abstract.** This research is related to the low student learning outcomes on the material of the body's defense system. This study aims to analyze the implementation of learning, improvement of learning outcomes, the effect of learning outcomes and student responses to the CIRC learning model. The research method used is quasi-experimental research design Nonequivalent Control Group Design using two classes XI MIPA 2 and XI MIPA 4 with research subjects as many as 62 students. The results showed that the average percentage of teacher activities was 97.36% and student activities were 93.41% on the material of the body's defense system. Learning outcomes data in the form of the average value of the pretest and posttest for the experimental class is 43.22 and the posttest is 84.83, while the pretest and posttest values for the control class are 48.70 and posttest are 70.80. Student learning outcomes have increased with an average value of 0.72 for the experimental class and 0.42 for the control class. Student responses to the CIRC learning model showed a positive response with an average value of 76.41. So it can be concluded that the CIRC learning model assisted by mind mapping media has a positive and significant effect on student learning outcomes on the material of the body's defense system with a significance level of Tcount 4.607 T table 2,000, which means  $H_0$  is rejected and  $H_1$  is accepted.

**Keywords:** CIRC, Body Defense System, Learning Outcomes