ABSTRAK

**PENGEMBANGAN MEDIA PEMBELAJARAN INTERAKTIF
TERINTEGRASI AUGMENTED REALITY PADA MATERI
PERUBAHAN WUJUD BENDA UNTUK MENINGKATKAN
KEMAMPUAN BERPIKIR KRITIS SISWA
KELAS IV SEKOLAH DASAR**

Oleh

RESTIYANITA

Penelitian ini bertujuan mengembangkan media pembelajaran interaktif terintegrasi *Augmented Reality* (AR) berbantuan Assemblr Edu serta menguji efektivitasnya dalam meningkatkan kemampuan berpikir kritis siswa pada materi perubahan wujud benda. Penelitian dilatarbelakangi oleh rendahnya kemampuan berpikir kritis siswa akibat dominasi metode konvensional dan materi yang bersifat abstrak. Metode yang digunakan pada penelitian ini merupakan jenis Research and Development (R&D) dengan model ADDIE. Uji coba lapangan dilaksanakan di SD Negeri 1 Sukarame menggunakan desain *Quasi Experimental* pada kelas IV B sebagai kelas kontrol dan kelas IV C sebagai kelas eksperimen. Data dikumpulkan melalui validasi ahli, angket, dan tes uraian. Hasil penelitian menunjukkan produk sangat layak dengan validitas ahli media 93,3%, ahli materi 96,74%, dan kepraktisan 94%. Uji efektivitas menggunakan *Paired Sample T-Test* menunjukkan signifikansi 0,000 < 0,05, dengan peningkatan *N-Gain* kelas eksperimen sebesar 0,62 (kategori Sedang), jauh lebih tinggi dibandingkan kelas kontrol. Disimpulkan bahwa penerapan media pembelajaran AR efektif dan praktis dalam meningkatkan kemampuan berpikir kritis siswa.

Kata kunci: *Augmented Reality*, Berpikir Kritis, Perubahan Wujud Benda, R&D, ADDIE.

ABSTRAK

**DEVELOPMENT OF INTERACTIVE LEARNING MEDIA
INTEGRATED WITH AUGMENTED REALITY ON
CHANGES IN STATES OF MATTER TO IMPROVE
CRITICAL THINKING SKILLS OF FOURTH GRADE
ELEMENTARY SCHOOL STUDENTS**

By

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This study aims to develop interactive learning media integrated with Augmented Reality (AR) assisted by Assemblr Edu and to test its effectiveness in improving students' critical thinking skills on the material of changes in states of matter. This research is motivated by students' low critical thinking skills due to the dominance of conventional methods and the abstract nature of the material. This study employs the Research and Development (R&D) method with the ADDIE model. Field trials were conducted at SD Negeri 1 Sukarame using a Quasi-experimental design in class IV B as the control class and class IV C as the experimental class. Data were collected through expert validation, questionnaires, and essay tests. The results showed that the product was very feasible with media expert validity of 93.3%, material expert validity of 96.74%, and practicality of 94%. The effectiveness test using the Paired Sample T-Test showed a significance of $0.000 < 0.05$, with an N-Gain increase in the experimental class of 0.62 (Medium category), which was significantly higher than the control class. It is concluded that the implementation of AR learning media is effective and practical in improving students' critical thinking skills.

Keywords: *Augmented Reality, Critical Thinking, Changes in States of Matter, R&D, ADDIE.*