

ABSTRAK

“PENGEMBANGAN MEDIA PEMBELAJARAN IPA BERBASIS *AUGMENTED REALITY* PADA MATERI STRUKTUR TUMBUHAN UNTUK SISWA SD KELAS IV”

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2024

Teknologi memiliki peran penting di dunia pendidikan, teknologi ini dapat membantu guru dan peserta didik untuk memvisualisasikan materi secara lebih interaktif dan menyenangkan. Namun, penerapan media pembelajaran teknologi ini belum optimal. Masalah lain adalah kurangnya kreativitas atau motivasi dalam belajar, terutama dalam memahami mata pembelajaran seperti Ilmu Pengetahuan Alam (IPA). Tujuan dari penelitian ini merupakan pengembangan media pembelajaran pada mata Pelajaran Ilmu Pengetahuan Alam (IPA) berbasis *Augmented Reality* (AR) pada materi Struktur Tumbuhan siswa SD kelas IV.

Metode yang digunakan adalah *Research and Development* (R&D) dengan menerapkan model *ASSURE*. Objek penelitian terdiri dari guru kelas IV SD Negeri Gambiranom, sementara objek penelitian adalah pengembangan media pembelajaran Ilmu Pengetahuan Alam (IPA) berbasis *Augmented Reality* (AR) untuk kelas IV SD dengan materi Struktur Tumbuhan. Teknik pengumpulan data melibatkan wawancara dan kuesioner kepada 6 validator 2 ahli media dan 4 ahli materi serta 26 siswa SD kelas IV.

Hasil dari penelitian ini menunjukkan bahwa (1) pengembangan media pembelajaran Ilmu Pengetahuan Alam (IPA) berbasis *Augmented Reality* (AR) pada Struktur Tumbuhan untuk siswa SD kelas IV dilakukan melalui enam langkah pengembangan *ASSURE*: 1) *analyze learners*, 2) *state objectives*, 3) *select technology/media/material*, 4) *utilize the media and material*, 5) *requires learners participation*, 6) *evaluate and revise*. (2) Kualitas produk media berbasis *Augmented Reality* (AR) pada materi Struktur Tumbuhan mendapatkan rata-rata skor presentase dari ahli media $\geq 80\%$ dan ahli materi $\geq 90\%$, sehingga dikategorikan sebagai "Sangat Layak". Selain itu, menurut pendapat dari 26 siswayang terlibat dalam penelitian ini, media berbasis *Augmented Reality* (AR) dianggap berkualitas dan sangat layak digunakan dalam proses pembelajaran sebagai sarana untuk meningkatkan motivasi belajar siswa.

Kata Kunci: Media Pembelajaran, *Augmented Reality*, Struktur Tumbuhan.

ABSTRACT

"DEVELOPMENT OF AUGMENTED REALITY BASED SCIENCE LEARNING MEDIA ON PLANT STRUCTURE MATERIAL FOR CLASS IV PRIMARY STUDENTS"

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2024

Technology has an important role in the world of education, this technology can help teachers and students to visualize material in a more interactive and fun way. However, the application of this technological learning media is not yet optimal. Another problem is the lack of creativity or motivation in learning, especially in understanding subjects such as Natural Sciences (Science). The aim of this research is to develop learning media for Natural Science (IPA) subjects based on Augmented Reality (AR) on Plant Structure material for fourth grade elementary school students.

The method used is Research and Development (R&D) by applying the ASSURE model. The research object consisted of class IV teachers at Gambiranom State Elementary School, while the research object was the development of Augmented Reality (AR)-based Natural Science (IPA) learning media for class IV SD with material on Plant Structure. The data collection technique involved interviews and questionnaires with 6 validators 2 media experts and 4 material experts and 26 fourth grade elementary school students.

The results of this research show that (1) the development of Augmented Reality (AR)-based Natural Science (IPA) learning media on Plant Structure for fourth grade elementary school students was carried out through six steps in developing ASSURE: 1) analyze learners, 2) state objectives, 3) select technology/media/material, 4) utilize the media and material, 5) requires learners participation, 6) evaluate and revise. (2) The quality of Augmented Reality (AR) based media products on Plant Structure material gets an average percentage score from media experts $\geq 80\%$ and material experts $\geq 90\%$, so it is categorized as "Very Decent". Apart from that, according to the opinion of the 26 students involved in this research, Augmented Reality (AR) based media is considered high quality and very suitable for use in the learning process as a means of increasing students' learning motivation.

Keywords: *Learning Media, Augmented Reality, Plant Structure.*