

Annuria Auliya Rahma. 2024. Pengembangan Majalah Sains Digital Keris Sumenep Berbasis Etnosains-*educational Augmented Reality* untuk Meningkatkan Kemampuan Argumentasi Ilmiah Siswa. Skripsi, Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing: Mochammad Yasir

ABSTRAK

Majalah sains digital keris Sumenep berbasis etnosains-*educational Augmented Reality* merupakan bahan ajar yang memuat pengetahuan umum keris Sumenep dan kaitannya dengan materi sains yaitu unsur, senyawa, dan campuran. Majalah sains digital dikembangkan dengan model ADDIE (*Analyze, Design, Development, Implementation, dan Evaluation*). Pengembangan majalah bertujuan untuk mengetahui kelayakan, keterbacaan, dan respons siswa serta meningkatkan kemampuan argumentasi ilmiah siswa. Penelitian dilakukan pada siswa kelas VIII SMPN 2 Bangkalan. Instrumen penelitian meliputi lembar validasi, angket respons siswa, angket keterbacaan media, dan tes argumentasi ilmiah. Hasil dari penelitian meliputi: (1) Majalah dinyatakan “layak” dengan validasi ahli materi mencapai 85.42% (sangat valid) dan 86.31% (reliabel), ahli media mencapai 85.76% (sangat valid) dan 90.48% (reliabel), guru IPA mencapai 85.42% (sangat valid) dan 100% (reliabel). (2) Majalah dinyatakan memiliki keterbacaan “sangat tinggi” dengan rata-rata mencapai 88.23%. (3) Majalah dinyatakan memiliki respons siswa “sangat baik” dengan rata-rata mencapai 87.50%. (4) Majalah dinyatakan mampu meningkatkan kemampuan argumentasi ilmiah siswa dari rata-rata skor 34.72 (cukup baik) menjadi 72.05 (baik), dengan nilai N Gain mencapai 0.57 (sedang). Maka dari itu, majalah sains digital keris Sumenep berbasis etnosains-*edu AR* merupakan bahan ajar yang layak dan mampu meningkatkan kemampuan argumentasi ilmiah siswa.

Kata Kunci: kemampuan argumentasi ilmiah, keris sumenep, majalah sains digital.

Annuria Auliya Rahma. 2024. The Development of Sumenep Keris Digital Science Magazine Based on Ethnoscience-Educational Augmented Reality to Improve Students' Scientific Argumentation Skill. Research Paper, Natural Science Education Study Program, Faculty of Education, University of Trunojoyo Madura. Advisor: Mochammad Yasir

ABSTRACT

The Sumenep keris digital science magazine based on ethnoscience-educational Augmented Reality is an educational tool providing knowledge of the Sumenep keris and its connection to science. Developed using the ADDIE model. The magazine aims to know its appropriateness, readability, students' response, and improve students' scientific argumentation skills. Research conducted among eighth-grade students at SMPN 2 Bangkalan using validation sheets, questionnaires, and tests. Based on the research findings, the following conclusions can be drawn: (1) The magazine received a "worthy" validation from material experts, scoring 85.42% (high validity) and 86.31% (reliable), media experts scoring 85.76% (very valid) and 90.48% (reliable), Science teachers scoring 85.42% (very valid), and 100% (reliable). (2) The magazine was classified as having "very high" readability with an average score of 88.23%. (3) The magazine was classified as a "very good" student response with an average score of 87.50%. (4) The magazine significantly improved students' scientific argumentation skills, as evidenced by the scores from 34.72 (fairly good) to 72.05 (good), with a N Gain value of 0.57 (medium). The Keris Sumenep digital science magazine is a valuable educational resource for enhancing students' scientific argumentation skill.

Keywords: *scientific argumentation skill, sumenep keris, digital science magazine.*