Development of numerical literacy flipbook based on augmented reality in optimizing digital libraries in elementary schools

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ABSTRACT

This study aims to describe the process of developing numeracy literacy flipbooks based on augmented reality in optimizing digital libraries in elementary schools. This research uses the type of research and development (R & D) using the ADDIE development model. Research subjects comprised 273 fourth-grade students in 10 elementary schools in Kapanewon Depok, Sleman, Yogyakarta. The data collection technique was obtained from a feasibility test using a media and material validation questionnaire, instrument validation and practicality testing using a teacher and fourth-grade elementary school student response questionnaire. The instruments included media validation sheets, materials and instrument validation, teacher and student response questionnaires, and elementary students' numeracy literacy test instruments—data analysis techniques using data reduction techniques, data presentation, and concluding. The results of the feasibility test validation show that augmented reality-based numeracy literacy flipbooks are appropriate for learning in grade IV SD and can be used as a digital library collection in elementary schools. The practicality test results also show that numeracy literacy flipbooks based on augmented reality are practically used in learning in class IV SD. In addition, the effectiveness test results show that flipbooks can effectively improve the numeracy literacy skills of elementary school students.

Kata Kunci: *Flipbook Numerical literacy Augmented reality Digital library*