

Integration of Educational Math Games and Self-Management Ethics to Improve Discipline and Digital Literacy of Elementary School Students

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ABSTRACT

This community service program aims to develop instructional teaching aids through multidisciplinary collaboration between lecturers and students from various study programs at the Islamic National University of Indonesia (UNIKI). The activity was carried out at SDN 8 Juli, an elementary school in a rural area of Bireuen Regency, Aceh, which faces limitations in concrete learning media. The approach used was the ADDIE model (Analysis, Design, Development, Implementation, Evaluation), which allows for a systematic and participatory development process. Based on the needs analysis, it was found that students had difficulty understanding abstract concepts in science and English subjects. To address this challenge, the team designed several innovative teaching aids, such as an erupting volcano model, a diorama of the rain process, bilingual science vocabulary cards, and thematic student worksheets (LKS). These media were then implemented in thematic learning in grades III and V. The results of the implementation showed improvements in conceptual understanding, learning interest, and student participation. Teachers also expressed enthusiasm and willingness to use the media independently in the future. Evaluation was conducted through classroom observation and teacher reflection, indicating that the developed media were appropriate for the needs and easy to apply. This activity demonstrates that cross-disciplinary collaboration can produce effective and sustainable learning media. This model is worthy of replication in other elementary schools, particularly those in resource-limited areas.

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