ABSTRACT

At the elementary school level, mathematics is one of the important subjects because it helps students understand logical concepts and problem-solving skills that are beneficial in everyday life. However, many students still struggle to understand basic mathematical concepts, especially multiplication and division operations. In addition to the factors of teachers and parents, the limited availability of educational learning media is also one of the reasons for the students' lack of understanding of the material. This research aims to design a block puzzle (Mathzel) to improve the understanding of multiplication and division concepts among third-grade students at Lengkong Public Elementary School. This research uses a mixed method, which is a combined approach of qualitative through case studies and quantitative through quasi-experiments with a one-group pre-test and post-test design to test the effectiveness of the developed product. Data collection techniques include observation, interviews, literature study, questionnaires, and documentation. The product design process uses the SCAMPER approach (Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, Reverse). The research results show that the block puzzle (Mathzel) is capable of enhancing students' understanding of multiplication and division concepts.

Keywords*: educational play tools, elementary school students, block puzzles, mathematics, Multiplication, Division, SCAMPER*