ABSTRACT

The elementary school level is the most appropriate time to build a foundation in learning, such as the formation of basic understanding such as reading, writing, and counting. However, there are problems that occur in learning, especially at the elementary school level, namely learning mathematics on multiplication and division operations that still depend on the lecture method (one-way system by educators). Of course, if this traditional learning method is maintained, it will have an impact on the absorption of material by students and become one of the main factors causing learning difficulties for students. Therefore, there is a solution to the problem, namely implementing education with learning methods according to interests and learning styles through digital learning media. By using the Goal-Directed Design method which is an interaction design design method that aims to achieve the ultimate goal of the user. So as to adjust user needs such as digital comic features, videos, digital books, and body movement games. There are usability testing results from each category, and optimal usability metrics have been produced. The effectiveness test results reached 95.56%, efficiency reached 96.82%, and satisfaction reached 82.5% with the "Excellent" category and Acceptable value, and obtained grade "A". This shows that the learning application has successfully achieved good usability standards and in accordance with the predetermined test objectives. Thus, it can be considered that the interaction design of this learning application meets the needs and expectations of users, so as to provide an efficient, effective, and satisfying learning experience for users.

Keywords: Testing Results, Goal Directed Design, SUS, VARK Learning.