

Abstract

The learning of basic mathematics in schools often leads to anxiety and a lack of focus among students. The use of existing learning applications has not yielded satisfactory results. Therefore, there is a need to design a user interface for a basic mathematics learning application that meets the needs and desires of the users. The Child Centered Design method is considered suitable for developing a user interface that aligns with the characteristics of children. Usability testing is conducted using the System Usability Scale (SUS) because it is a simple and easily understandable usability measurement tool. The measurement of anxiety levels is also performed using the Math Anxiety Test. Testing is carried out at SDN Kebonsari 1 Tuban with 5B-grade students as respondents. Data is collected through observation, interviews, and testing similar applications using a learning application called "Mathematics SD." Evaluation results show that the System Usability Scale (SUS) score reaches 85.19, with "excellent" adjective ratings and a grade scale of B, indicating a significant improvement in the usability of the application. Additionally, the Math Anxiety Test score in the experimental group shows a significant improvement at 16.38 compared to the control group, which scored 34. This indicates that the user interface of the basic mathematics learning application designed with the Child Centered Design method successfully reduces student anxiety levels and enhances the overall user experience.

Keywords: Basic Mathematics, Child Centered Design, Learning Application, Math Anxiety Test, System Usability Scale (SUS), User Interface.