ABSTRACT

This study aims to design and develop an educational reading game application for early childhood students at TK Tunas Harapan using the Feature Driven Development (FDD) method. The application is designed as an interactive learning medium to support the development of early reading skills through a digital game-based learning approach. FDD was chosen for its structured feature development process, tailored to the needs of key users such as teachers, parents, and children. The research uses a quasi-experimental method with a One Group Pretest-Posttest Design. The testing involved 14 early childhood students, whose reading ability was assessed through pretest and posttest involving letter recognition, phonics, and word formation. Data were analyzed using the Wilcoxon Signed-Rank Test, as the difference data were not normally distributed based on the Shapiro-Wilk test. The results showed a significance value of p = 0.01576 (p < 0.05), indicating a significant difference between pretest and posttest scores. Therefore, it can be concluded that the developed application effectively improves early reading skills in young children at Tunas Harapan Kindergaten.

Keywords: Educational Game, Early Reading, Feature Driven Development, Early Childhood, Wilcoxon Test