

Abstract

Reading ability is a basic skill that is important to be taught from an early age. Children with intellectual disabilities at Special School in Tasikmalaya have difficulty in recognizing letters, especially vowels. Traditional teaching methods are less effective in attracting attention and maintaining students' interest in learning. Therefore, this study builds a pedagogical agent using Direct Instruction approach integrated into the multisensory educational game "Belajar AIUEO" which is built using the Rapid Application Development method. The pedagogical agent in the game functions to provide instructions, feedback, and motivation at various phases of Direct Instruction. The results of the experiment using the One Group Pretest-Posttest Design method conducted on 14 students with mild and moderate intellectual disabilities showed a significant increase in the ability to recognize vowels in children with intellectual disabilities. The average score increased from 18.43 in the pretest to 21.36 in the posttest. The Wilcoxon Signed Rank Test showed that the pedagogical agent with Direct Instruction had a significant effect on improving the ability to recognize vowels in children with intellectual disabilities.

Keywords : children with intellectual disabilities, pedagogical agent, recognizing vowels, multisensory, rapid application development.