

Abstract

The cognitive ability of early childhood is a crucial aspect of individual development, especially during the Golden Age, a period of rapid physical and intellectual growth. In Class B of PAUDQu Al-Aqsha, it was found that 61.1% of students exhibited low cognitive abilities, necessitating special attention in the learning process. Furthermore, the currently available Educational Play Equipment (APE) is considered suboptimal in supporting children's cognitive development. Therefore, this research aims to design APE that is appropriate for the developmental stages of early childhood, specifically for the 5-6 age group, to support their cognitive abilities.

This research implements the Quality Function Deployment (QFD) method to translate user needs and preferences obtained through interviews and ethnographic observations, into technical specifications for Educational Play Tools (APE) design.

The study results indicate that the designed Educational Play Tools (APE) effectively meets customer needs and aligns with the developmental stages of early childhood (5-6 years old), thereby supporting the improvement of children's cognitive abilities. This Educational Play Tools (APE) is specifically designed to provide optimal cognitive stimulation through educational, interactive, and engaging play activities.

The implication of this research is the potential of the designed Educational Play Tools (APE) to significantly boost children's cognitive abilities. Thus, the implementation of this APE design is expected to be an effective solution for addressing the problem of low cognitive abilities in early childhood.

Keywords: Educational Play Tool (APE), Cognitive Ability, Quality Function Deployment (QFD)