AN AR BASED LEARNING APPROACH FOR KINDERGARTENS

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Abstract

The kindergarten is the place where the toddlers start learning under a proper learning environment. But the traditional ways of teaching language basics at kindergartens have been found tedious and less effective by modern day kids. As the kids will bring their experiences in the future, one negative experience at the education may mislead them to think that the effects of following a proper education system are negative and uncanny. But the kids are always enthralled by the novel technologies. In this research, the application of Augmented Reality has been leveraged to design and develop a learning approach which eventually evaluates the cognitive ability of a kid through gamified learning activities. The developed learning approach utilizes AR, voice recognition, gamification mechanics and Bloom's Taxonomy to make the approach fruitful. In the innovated system, the kid can interact with the application freely and the data which are required to evaluate the kid's cognitive ability and the learning session are recorded. Afterwards, the parents or the teacher can track the learning session undergone by the kid and evaluate the growth of the cognition. This developed solution stands above the existing kindergarten learning applications because of its unique features and the applicability. All the gamified learning activities are designed to properly map with the Bloom's Taxonomy levels of cognitive growth. Hence the effectiveness of the developed learning approach is convincing.

Keywords: Augmented reality, Gamification, Voice recognition, Bloom's Taxonomy