

## ABSTRACT

AR (Augmented Reality) is a technology that combines physical objects that are translated using a smartphone camera, the results can be in 3D. Based on interviews that have been conducted with the head kindergarten teacher, the method of delivery/teaching is still in the form of a book. In the teaching system, students at Muslimat Waliyah Zainab Kindergarten also have no problems, however, the hope of teachers at Muslimat Waliyah Zainab Kindergarten is for progress or innovation. In this case, which is where it can help children, especially preschool age, this research aims to help PAUD teachers at Muslimat Waliyah Zainab Kindergarten, in order to facilitate the learning process by using AR technology to make it easier to recognize various animals and types of food such as carnivores, Herbivores, Omnivores. The system of the application itself is in the form of a picture card that can be scanned using the camera on the application which will produce an output in the form of a 3D form of the animal and the type of food accompanied by audio. In making this application the method used is Waterfall. There are three menus in this application, namely, the Scan, Quiz, and Material menus, and the marker used is a card. It is hoped that the creation of this game application can provide new innovations in the learning interest of Muslimat Waliyah Zainab Kindergarten students in the introduction of various animals based on AR-based food types..

*Keywords: Augmented Reality, 3D, PAUD Muslimat Waliyah Zainab, Carnivores, Herbivores, Omnivores.*