

UNIVERSITI TEKNOLOGI MARA

**THE EVALUATION OF USER
EXPERIENCE ON AUGMENTED
REALITY APPS IN TEACHING THE
SCIENCE SUBJECT ABOUT THE HUMAN
BODY SYSTEMS TO KINDERGARTEN
CHILDREN**

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ABSTRACT

Augmented Reality (AR) technology has become one way to combine play and learning, and children can use it to develop both their mental and cognitive abilities. From the interviewed that have been conducted with teacher of Kemas Kindergarten, said that, that children hard to remember with existing learning process. Hence, it is necessary to shift the traditional format for presenting information to an Augmented Reality approach. Augmented Reality technology may provide an opportunity for the child according to his/her abilities to develop mental and cognitive skills that are not encouraged by traditional methods. Considering this situation, the purpose of this study is to evaluate the user experience of Augmented Reality technology in children's learning education and to conduct a mixed research, collecting both qualitative and quantitative data to assess Augmented Reality's value as an education tool. The objective of the thesis is to evaluate the user experience of augmented reality technology in children's learning education. This study investigated the user experience from four dimensions as emotional, instrumental, motivational and social experience when using Augmented Reality as an education tool. The researcher decided to use both observation and interview to collect data. This study is a mixed study but focused more on qualitative data analysis. Thirty children were recruited and the data were collected through observation and interviews. According to the results, users evaluated their emotional experience higher than the other three dimensions. Results also indicated that novice Augmented Reality users evaluate this Augmented Reality education tool differently, which could be a future direction for this research. In addition, this study was limited by the time. A longitudinal study is suggested in the future to examine and evaluate Augmented Reality values in education over a long period of time. This study was limited by the diversity of the demographic. Finally, this study only recruited children at the Kemas Kindergarten because they tend to be the early adopters of technology.

Keywords: Augmented Reality (AR), Information and Communication Technology (ICT), User Experience, Kindergarten Children

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