

## Analyzing Mobile Based Application Using Montessori Method in Oman

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This paper presents an overview of learning by an interactive media. In childhood the children can learn faster and absorb knowledge and new information. The Montessori Curriculum is the best method for children to learn because it depends on tools, sensoria and experiments. The Montessori Method has many resources and tools to do experiments. The client of this research is Whay Al-Hikmah Private School has these resources and they are used in the class room. However, when the children go back home, they can't revise and repeat these experiments because they do not have the necessary tools. children like to use electronic devices like mobile phones, tablets and computers. As a reason an educational application will be an easier way and an interactive media to assist children to gain knowledge and learn different kind of information and also to do these experiments in interactive media.

**Keywords:** Child education, Montessori, E-learning, Mobile Application, Multimedia in Education

### Introduction

Observing and interacting with children can help in knowing how children learn. They develop good ways of thinking using the Montessori Method. Maria, M. (2004) Montessori Method is going to teach children how and when they tell hello, thank you, and welcome. Mitchel, R. (2004) The Montessori Method isn't only help the children to learn, but also engender a true love of learning. Mitchel, R. (2004) Interactive media can help children to support learning and developing the skills of critical thinking, scientific research and analysis. Prototype Model image (2017), Most of people are interact with animations, games and simulations all of the time. But few of people can create an interactive media because the programming languages are difficult to understand and learn. Prototype Model image (2017)

Interactive media is very important to make children like learning. Implementing the educational application to allow the children to get information in an interactive media and to allow them to revise which they studied.

### Existing System

The teachers in Whay Al-Hikmah Private School are going to teach the kids by Montessori Method. Montessori Method needs many resources and tools to do experiments. The school has these resources and they are used in the class room, however, when the kids go back home, they can't revise and repeat these experiments because they do not has the needed tools.

### Proposed System

I will build an application that will help kids to do the experiments in interactive media. It will also help them to gain knowledge and understand more about what they study in the class room. That application will be about culture area. It will has many videos and attractive class.

### Analysis

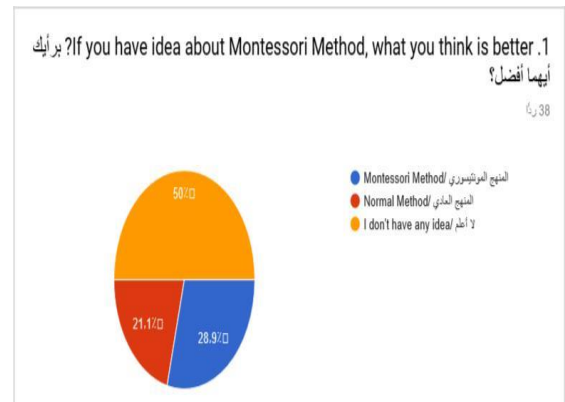


Figure 1

50% answered that the Montessori Method is the best method to teach the children. In other hand, 21.1% answered that the normal method is the better. Moreover, 28.9 don't know which one is the best, because they don't know what the Montessori Method is

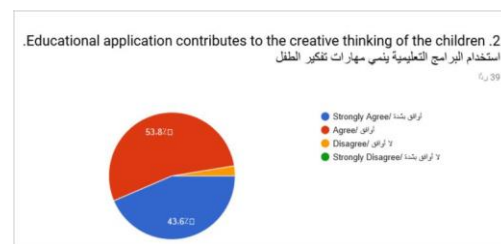


Figure 2

97.4% answered that the educational application contributes to the creative thinking of the children. In other hand, 6% are not agree because they think that the application has bad effect for children more than good effect.

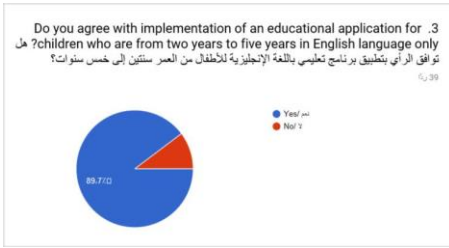


Figure 3

89.7% are agree to implementation of an educational application for children who are from two years to five years in English language only. In other hand 10.3%. are not agree.

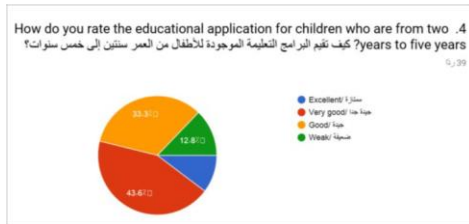


Figure 4



Figure 5

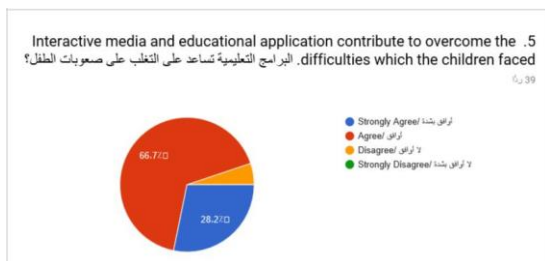


Figure 6

10.3% rate the educational application for children who are from two to five years is excellent. In other hand 43.6% is very good. Also 33.3% is good. Moreover 12.8% is weak.

28.2% are strongly agree with interactive media and educational application contribute to overcome the difficulties which the children faced, also 66.7 are agree with that. In other hand, 5.1% are disagree and 28.2% are strongly disagree.

The most of people told that use of educational application is increasing motivation for education

because it is interesting tool and it attract children to use and learn from it. They also will increase their confidence because they learn by educational application their self and they don't need any help from other. Some people told that the educational application has bad effect for children, because the children like to discover and learn new things, when the children use the application and no one observe him, it may will learn bad things. In other hand, some people told that when the children use the application in right way, it will be good for him and for their thinking.



Figure 7

Conclusion

It has been observed that using educational applications to teach the students has a good reflection on the understanding the concept. The visual effects of Montessori method used through the educational application using hand held device will add more values to the education in terms of practical implementations. The learning happened by using this method will be better. Analysis of usability of mobile application will done through the download count of the application and feedback provided from the users and the educators.

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