

Title	Developing educational game which prevents children from video game addiction
Sub Title	
Author	Shaikh, Bassam Essam A(Nakano, Masaru) 中野, 冠
Publisher	慶應義塾大学大学院システムデザイン・マネジメント研究科
Publication year	2016
Jtitle	
JaLC DOI	
Abstract	
Notes	修士学位論文. 2016年度システムデザイン・マネジメント学 第223号
Genre	Thesis or Dissertation
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=KO40002001-00002016-0018

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

**Developing Educational Game Which
Prevents Children from Video Game
Addiction**

Shaikh Bassam Essam A

(Student ID Number : 81434605)

Supervisor Nakano Masaru

March 2017

Graduate School of System Design and Management,
Keio University

Major in System Design and Management

SUMMARY OF MASTER'S DISSERTATION

Student Identification Number	81434605	Name	Shaikh Bassam Essam A
Title Developing Educational Game Which Prevents Children from Video Game Addiction			

Abstract

School children addicted by video games are increasing in Saudi Arabia. This study focuses on the addiction of video game mainly in Japan and Saudi Arabia, and how this addiction affects children performance at their schools. The purpose of this study is to identify the motivation of children to play video games, understand the video games culture in Saudi Arabia and develop an educational game. The educational game motivates children to their science subjects in the classroom to understand more about science in a different approach instead of using only papers and pencil.

In this paper, a Grounded Theory Approach is employed to find the causes of video game addiction in both countries and to generate new findings based on data collection. To understand the needs, stakeholder analysis is applied followed by requirements analysis in order to design the game. The tool used to design the game is MESH created by SONY. MESH consist of seven tags, each tag function different from the other one, and it can be used to create any idea by using the software which helps user to connect the tags via Bluetooth. Two versions of the game are created to help understand the different outcome between the two groups in the experiment. The game applies different STEM concept in each stage. At the first stage of the game, children need to solve mathematical equations to obtain four-digit number to unlock the iPad in order to access the software, and proceeding further steps to continue the game by creating recipes on the software

Experimental results show that parents and educators in Saudi Arabia are seeking an educational game for their children at their school to help improve their STEM level in a different way than the normal approach. The interview, suggests that children prefer interactive educational game rather than classic games, and most of them want to become an engineer especially after experiencing the MESH game. Interview was conducted on children to understand their experience and opinion before playing the game and after.

“
”

One of the the questions which was asked to students is “do you enjoy solving puzzle and math equations”, For the students who played mesh game, the mean has been higher than the ones who played classic game. Thus, it can be concluded that the mesh game helps students more in math equations solving and puzzles.

Key Word (5 words)

Video game addiction, Video game culture, STEM, MESH, Educational Game