CHILD RIGHT BRAIN DEVELOPMENT: LEARN ORIGAMI THROUGH TWO DIMENSIONAL (2D) ANIMATION

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CHILD RIGHT BRAIN DEVELOPMENT: LEARN ORIGAMI THROUGH TWO DIMENSIONAL (2D) ANIMATION

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This report is submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Media Interactive)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA 2011

DECLARATION

I hereby declare that this project report entitled

CHILD RIGHT BRAIN DEVELOPMENT: LEARN ORIGAMI THROUGH TWO DIMENSIONAL (2D) ANIMATION

is written by me and is my own effort and that no part has been plagiarized without citations

(ZULAIKHA BTE MOHD ANWAR) **STUDENT**

SUPERVISOR

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DEDICATION

To Allah SWT...

To my beloved prophet, Rasulullah SAW...

To my beloved parents, Hajjah Khaireyah and Hj Mohd Anwar, sisters and brothers...

To my beloved friends....

and to my best supervisor Pn. Norazlin bt Mohammed and my evaluator Cik Sarni
Suhaila bt Rahim...

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ABSTRACT

Learning by using a book is not an appropriate method because all the data are stored in conscious memory which is a left brain hemisphere. The new project aim is to develop child right brain including seeing, listening and animation to make data captured into memory as an image form. By following the project aim, Child Right Brain Development by Learning Origami Through 2 Dimensional (2D) Animation is delivering the child right brain learning style through making origami. Using the right brain learning style, it uses intuition, creativity and imaginative as a main point to develop child right brain. The proposed project is able to trigger the child right brain development especially for kids' age three until six and the kids will have more talent to create an origami in crisper and clearer vision; and three-dimensional visualization. The 2D animation will be delivering in .mpeg form.

ABSTRAK

Pembelajaran menggunakan buku adalah cara yang kurang memuaskan kerana semua maklumat akan disimpan didalam otak kiri. Tujuan projek baru ini adalah untuk membangunkan otak kanan kanak-kanak termasuk melihat, mendengar dan animasi untuk disimpan didalam memori sebagai data yang berimej. Dengan berdasarkan kepada tujuan projek ini, Child Right Brain Development by Learning Origami Through 2 Dimensional (2D) Animation dibangunkan untuk menyampaikan cara pembelajaran otak kanan dalam menghasilkan origami. Dengan kaedah cara pembelajaran otak kanan, ia menggunakan kata hati, kreativiti dan imaginasi sebagai perkara utama untuk membangunan otak kanan kanak-kanak. Projek yang dicadangkan mampu mencetuskan pembangunan otak kanan kanak-kanak khususnya untuk kanak-kanak berumur tiga hingga enam tahun dan kanak-kanak ini akan mampu menghasilkan origami dengan visi yang lebih jelas dan tiga dimensi visualisasi. Animasi 2D ini akan disampaikan dalam bentuk format .mpeg.

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LIST OF ABBREVIATIONS

2D - 2 Dimensional
3D - 3 Dimensional
CD - Compact Disk
CS4 - Creative Suite 4

CS5 - Creative Suite 5

DVD - Digital Video Disk

MPEG - Moving Picture Experts Group

.swf - Shockwave flash

TV - Television

LIST OF APPENDICES

APPENDIX	TITLE
A	Questionnaire
В	Gantt Charts
C	Storyboards
D	Scripts

CHAPTER I

INTRODUCTION

1.1 Project Background

Children have special inborn talent which is easy to develop with parental guidance. They are always using their imagination to draw and writing. The imagination is related to the right brain. The right brain has a high capacity to store many information which they see, listen, touch and else. Besides, right brain hemisphere processes random, creative, intuitive, and multi-sensorial images while the left brain hemisphere processes linear, concrete factual information and logic.

In developing the child right brain, the right brain learning approach is used. Right brain learning approach emphasizes five senses which are perfect memory, rapid calculation math, language acquisition, perfect pitch and intuition. All this senses are related with left brain senses which are sight, sound, taste, touch, and smell. When the natural inner right brain senses mix with conscious left brain knowledge, it will be out picturing a unique intelligence abilities.

The two dimensional (2D) animation is used in developing child right brain to get more attractive to the children. Besides, animation is including image, sound and movement based on what they see and listen compared when using a book, the children only read and see on a static picture.

Recently, learning the origami by using the book is more difficult because it only combines the interaction between reading, seeing and static image. Therefore, creating origami in right brain learning style can make the children become more immersive. The children will capture the image using a left brain senses and turn it into image form and stored in subconscious memory. Then, the children will retrieve the image stored and start doing again and again by using a left brain sense according to the right brain senses.

The process of this 2D animation will take seven minutes duration to complete. Therefore the duration is sufficient enough to target on three until six years old kids.

1.2 Problem Statements

Learning by using a book is not a good method because it is more difficult to understand and memorize. It comes out when the children cannot remind the entire lesson at the end of the teaching session. It is because all the data are stored in conscious memory which is a left brain hemisphere. The left brain turn the data into a language form. This requires a "sequential processing", whereby data is processed one bit at a time. Human needs interactions which are seeing, listening and animation to make data captured into memory as an image form. The information processes of the right brain are very quickly as images. It is the automatic processing capability that allows the brain to organize and store all these memory images instantly.

Creating origami using the book is more difficult compared by using 2D animation. It is because the children only read the steps while trying create the origami by hand. Origami is needed to make by using a hand through folding and sculpting techniques. Normally, the children just using a hand to write, draw picture and counting numbers in purpose for holding pencil in a correct ways. But, in creating an origami, hand is used to make the children apply all their senses such as touch, taste and sight.

1.3 Objectives

The main objectives to achieve from this project are:

a) To develop child right brain development for 3 - 6 years old kids by creating origami.

The main objective of this project is to develop children's right brain by creating origami. The right brain is a effective sponge and immerses up images every second. It even records several images and languages at once without any confusion. It relates with age 3 - 6 years old kids that have high level of imagination. They store data all around them in right brain memory such as touch, taste, sound and others. It assembles all the senses into animation as a main form which the best method for children to make an origami. The children will capture the image using a left brain senses as image form and stored in subconscious memory.

b) To develop right brain learning style in creating origami

In developing child's right brain, right brain learning style is use. Right brain learning style emphasizes five senses which are perfect memory, rapid calculation math, language acquisition, perfect pitch and intuition. All this senses are related with left brain senses which are sight, sound, taste, touch, and smell. Once the right brain senses put together with conscious left brain knowledge, it will produce unique inborn intelligence abilities. With all senses, the children can create an origami.

c) To develop TV edutainment

Shockwave flash (.swf) is not an appropriate format to develop 2D animation. Therefore, authoring tool like Flash is now support for Moving Picture Experts Group (MPEG) form to integrate with TV edutainment platform. It is also provides higher video quality at lower bit rates of MPEG.

1.4 Scopes

This project is subjected mainly to children. The potential audience of this animation is three until six years old kid whereby this stage of age are suitable time for recognizing colors, shapes and letters. Besides, the children are very curious about their environment and keep asking about something.

The process of this 2D animation will take seven minutes duration to complete. Therefore the duration is sufficient enough to target on three until six years old kids.

This project 2D animation process involves the authoring tools which is Adobe Flash CS5 Professional. The final output will be form in MPEG standard to integrate with TV edutainment platform. The video standards and recording formats of TV edutainment is based on system TV in Malaysia which is PAL in level three.

1.5 Project Significance

This 2D animation will help trigger the child right brain development. This can be useful in their daily life. They will try to solve problems in a creative way. Once the right brain's development had trigger this can make their creativity to burst out, this means they will have more talent to create an origami in crisper and clearer vision; and three-dimensional visualization.

Since most the educations today are only concerns on the left brain development, 2D animation able to expose the children to trigger with their right brain which is results them to be a whole brainer. After their children watch this 2D animation, parent can see the way of children create an origami.