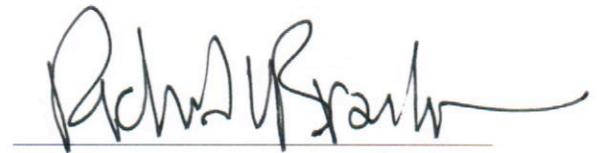


The Thesis Committee for Fatimah Alhassan  
certifies that this is the approved version of the following thesis:

The Little Artist: Interactive Art Center

A handwritten signature in black ink, appearing to read "Richard Branham", written over a horizontal line.

Chairperson Richard Branham

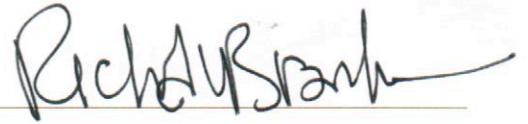
Date approved: June 7<sup>th</sup> 2011

The Little Artist: Interactive Art Center

By

Fatimah Alhassan

Submitted to the graduate degree program in Architecture, Design and Planning. Interaction Design and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Master of Arts.



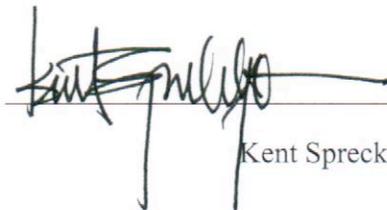
Chairperson Richard Branham



Jeremy Shellhorn



Andrea Herstowski



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Date Defended: June 7<sup>th</sup> 2011

# **The little Artist: Interactive Art Center**

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## **Abstract**

In this project, an art-learning center located in a shopping mall in Saudi Arabia is designed for 3 to 5 year old kids.

# Design Research

Including surveys, cultural research, marketing research and user needs.

## The Survey and the result

- 14 questions are designed to find people's needs and wants;
- 27 Saudi participants involved.
- 70% consider shopping malls as a place for entertainment or relaxing
- 74% consider shopping malls a good place for entertaining kids
- 33% go to shopping mall 2 to 4 times on monthly basis
- 26% go to shopping mall 5 to 7 times on monthly basis

## Cultural Research

Different Shopping mall culture;

Different eating culture;

Different proxemics

- **The Shopping Mall Culture**

Shopping malls in Saudi Arabia have different culture including: the different weekdays and weekend, opening and closing time, and how the worship affects that.

- **Who is going to shopping malls more?**

The majority of malls are viewed as family malls. There will likely be security guards at each entrance way to the mall to ensure that only women and families are allowed enter.

Single men or groups of men are generally not allowed admittance to the mall.

- **Why go to Shopping Malls?**

- **Shopping:** Almost all items and well-known brands available in Europe and North America can be found in Saudi Arabia, with the exception of course of

alcohol and pork products.

- **Eating:** Restaurants and food service outlets are required to have two entrances with two segregated seating areas, one for males and the other for families and females. Entertaining kids: Most of the new shopping malls has play area for kids  
Socializing: Shopping malls consider a good place to meet with friends and spending the day together.
- **Grocery:** There are always big supermarkets open inside the mall.
- **Proxemics:** Between the same gender: Saudi people keep small distance especially between friends. Between the Opposite gender: No shake hand, no touch or any physical contact. Standing very close or sitting next to each other is not recommended IF they are not a family.

## **Marketing Research**

As a new way of providing service, research about traditional education and the education market was carried out here.

- **The Education Market**
  - Only 8 % of the Saudi kids goes to kindergarten.
  - It is difficult for younger age kids to find a kindergarten.
  - For working moms they either keep their kids with the grand moms or with the house made.
- **Art Education** Many people think art education is not very important. People interested in art has hard time to find places to learn either for themselves or for their kid.

## **The Literature Review**

About learning;

About child development.

- **Learning: Informal Learning**

It is semi-structured and occurs in a variety of places, such as learning at home, work, and through daily interactions and shared relationships among members of society. Informal learning can be characterized as follows: It often takes place outside educational establishments standing out from normal life and professional practice. It does not necessarily follow a specified curriculum and is not often professionally organized. It is not necessarily planned.

- **Learning: Situated Learning**

At its simplest, situated learning is learning that takes place in the same context in which it is applied. It is situated in a specific context and embedded within a particular social and physical environment.

- **Learning: Community of practice**

It is a group of people who share an interest, a craft, and/or a profession sharing information and experiences with the group that the members learn from each other, and have an opportunity to develop themselves personally and professionally.

- **Learning: Experiential learning**

It is a philosophy of education that describes the process that occurs between a teacher and student that infuses direct experience with the learning environment and content. It is the process of making meaning from direct experience.

Experiential learning focuses on the learning process for the individual

Experiential learning requires no teacher and relates only to the meaning making

process of the individual's direct experience.

- **Learning: Constructivism**

Constructivism is a theory of knowledge that argues that humans generate knowledge and meaning from an interaction between their experiences and their ideas. From the social constructivist viewpoint, it is thus important to take into account the background and culture of the learner throughout the learning process, as this background also helps to shape the knowledge and truth that the learner creates, discovers and attains in the learning process.

- **Learning is an active, social process**

McMahon (1997) agrees that learning is a social process. He further states that learning is not a process that only takes place inside our minds, nor is it a passive development of our behaviors that is shaped by external forces and that meaningful learning occurs when individuals are engaged in social activities.

- **Child development**

From his observation of children, Piaget understood that children were creating ideas. They were not limited to receiving knowledge from parents or teachers; they actively constructed their own knowledge. Piaget's work provides the foundation on which constructionist theories are based.

Piaget identified four major stages: sensorimotor, preoperational, concrete operational and formal operational.

## **Designing the art center**

Personas, scenario, storyboard Frameworks, 3D models Prototype

## **Modeling the users (Personas)**

### **Mona**

34 Years working mother.

Has one kid ( Arwa) 4 years old.

She's a high school math teacher.

Mona has been married for 6 years.

She keeps her daughter with the grandma while she is working from 6 am to 3 pm.

### **Arwa**

4 years old girl.

Love drawing and crafts.

Arwa use to spend most of her time in her grandparents house drawing, she makes paintings for her mom and dad every day.

### **Deena**

37 years old housewife

Has 3 kids: 12, 8 and 5

Deena has been married for 14 years.

She is the one take care of the house, kids, and their school. She wakes up every morning to prepare the kids for the school, preparing breakfast for them . Waiting until they leave to start the housework, Doing the grocery, cooking.

### **Mahdi**

5 years old boy.

Very interested in video game.

Mahdi goes to day care in the morning until 1 pm.

He spends his free time playing computer game. He always refuse to go out with his family because he wants to stay home playing. He gives every body hard time when they are out, complaining about everything. Asking to go home because he is board.

### **Sketching the experience (story)**

A story how the art center works and benefit the kids and the parents

### **Visualizing the Art Center (Physical maps, 3D models)**

Physical map of the Art Center.

- **The Reception Area.** - Applying Falk and Dierking's Model of Learning.
- **The Library Platform.** - Applying Falk and Dierking's Model of Learning.
- **The Traditional Art Platform and Sand Area.** - Applying Activity Theory.
- **The Multi-media Platform.** - Applying Pine and Gilmore's the experience realms framework.
- **The 3 years old play ground.** - Applying Spradley ethnographic approach participant observation. - Branham's model.

## **Testing the idea out**

### **Zone of proximal development**

The zone of proximal development, often abbreviated ZPD, is the difference between what a learner can do without help and what he or she can do with help.

### **Instructional scaffolding**

Instructional scaffolding is the provision of sufficient support to promote learning when concepts and skills are being first

### **Testing video**

## **Conclusions**

- Game preference related with the complexity of the game and the player's age
- Kids are fast learners and mostly learn by trying rather than asking.
- Recorded books were less attractive comparing to the touch-screen.
- Bright colors, animations, music and sounds make the games more fun to kids.
- Kids that were tested have very good memory about the color and shapes.
- Games can be addictive to young kids.

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