

# A Busyboard Of Taj Mahal

Black Taj

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## 1 Design Concept

The purpose is to boost children's physical and mental health and train for their fine movements and different senses under the scenery of 3D Taj Mahal busyboard. The need is crucial because 0 to 2 is the fastest period for children to develop their brain. During the period, the differentiation and growth of brain nerve progress rapidly<sup>i</sup>. Thus, it's important to motivate their senses and 3D concept.

## 2 Related Work

### 2.1 Black Taj Nei Gang Quzhou No.2 High School

Nei Gang is my art teacher when I'm in high school. He once showed me a black Taj model made of paperboard and its story.

### 2.2 Legend of Black Taj

Taj Mahal was built to immortalize Shah Jahān's wife, Mumtaz Mahal, who died at her 14th childbirth. His obsession is to build a black Taj Mahal next to Taj Mahal with the same characteristics. Starting from this history, the legend began to spread<sup>ii</sup>.

### 2.3 Tavernier's writing

A French traveller, Tavernier, found his way to the royal court under Shah Jahan's power. He wrote the legend in his diary<sup>iii</sup>.

## 3 Description of My Work

The main part of the busy board is a circuit and a 3D painting Taj Mahal model. The model is painted black to fit in the story and the 3D file is from internet<sup>iv</sup>. The other part of model is kept orange because it's more attractive to children compared to black. The circuit is connected by tin and there is paperboard above them. A 1K  $\Omega$  resistor is attached to the switch to prevent short-circuit when the switch is on. The 1K  $\Omega$  resistor is changed into 220  $\Omega$  in the DFPlayer Mini

to reduce noise. There are different holes in it with different shapes. Moreover, the different shapes provide different texture to give various touching experiences. The rotation of paperboard circle provide interactive experience. Some of the circuit model is exposed to player in the front aiming to help players to see what the circuit look like.

#### **4 Discussion**

First, the centre of the busy board is made of 3D model of Taj Mahal and the color is black which perfectly suits the story. Moreover, on the cover, different holes are to show the materials beneath the paperboard and it's associated with touching. The rotation of paperboard circle promote fine finger movements. Bright-coloured paperboard attracts children<sup>v</sup>. The button controls the LED and will light the Taj to interact with visual sense and the music will interact with listening. To build strength, hook&loop is also provided.

#### **5 Summary**

In conclusion, the whole design of the busyboard is based on the legend of Black Taj. Through interaction, I want to promote player's senses and strength which are beneficial for their whole wellbeing. In order to achieve this, abrasive paper and other materials are applied. Together, I hope they will provide enjoyable experience for children.

#### **REFERENCES**

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<sup>iii</sup> Divija jain, Theory Of Black Taj Mahal; Failed Attempt To Create A Mirror Image Of The Original One, <https://edtimes.in/theory-of-black-taj-mahal-failed-attempt-to-create-a-mirror-image-of-the-original-one/>, 2020.8.20

<sup>iv</sup> ccvvv5,detailed model of Taj Mahal, <https://www.most3d.cn/model/6206/>, 2020.8.18

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