# The learning media about the Solar system for the blinds

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#### Abstract

The learning media about the solar system for the blind is the models with the planets' surface characteristics. This study also tested the efficiency of these models about how can the blind has the better understanding about the solar system than the other learning media.

## 1. Introduction

Usually most blind people use Braille to learning but Braille is not able to make the students imagine about the content. The solar system learning media for the blind was created for imagination about the planets' surface. In addition, this learning media also has its subtitles and Braille captions.

### 2. Research methodology

1) The shape of a spherical plaster cast is carved according to the surface of each planet.

2) [1<sup>st</sup> version of model] Test the model by asking advice from 30 people who have closed their eyes.

3) [2<sup>nd</sup> version of model] Make changes corresponding to the responses from the 30 people and test this on 10 blind people.

4) [3<sup>rd</sup> version of model] Again, make changes as mentioned by the 10 blind test subjects, then test these changes on 30 blind people, including the 10 blind people who already tested the models.

5) [4<sup>th</sup> version of model] One again, effect changes from the feedback from the group of 30 blind people.

6) [5<sup>th</sup> version of model] Test subjects with both a pretest and post-test.

- Pre-test: Blind persons who have never been touched to the models before.

- Post-test: Retest those from the pre-test by having each person identify the name of the planet based on the models



Figure 1: Picture of testing the solar system model usage with blind people.

3. Results and Discussions The 5<sup>th</sup> version of the models is the best version to help the blind students understand about the surface. From Pre-test and Post-test, found that the blind students feel confident in their answers and got the better result in Post-test.

Table 1: Result of the test before and after touching the model

The number	Number of people ( 30 people )	
of responses	Before touching	After touching
0-3	19	2
4-6	11	7
7 up	-	21



Figure 2: The learning media about the solar system.

#### 4. Conclusions

The learning media about the Solar System for the blind can help the blind people learn, understand and sense about the planetary surface than using Braille or listening the subtitles.

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# 6. Reference

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