



## Vibrating Braille for the smartphone.



### Project Goals:

- Design Braille-learning games that can be played on Android devices.

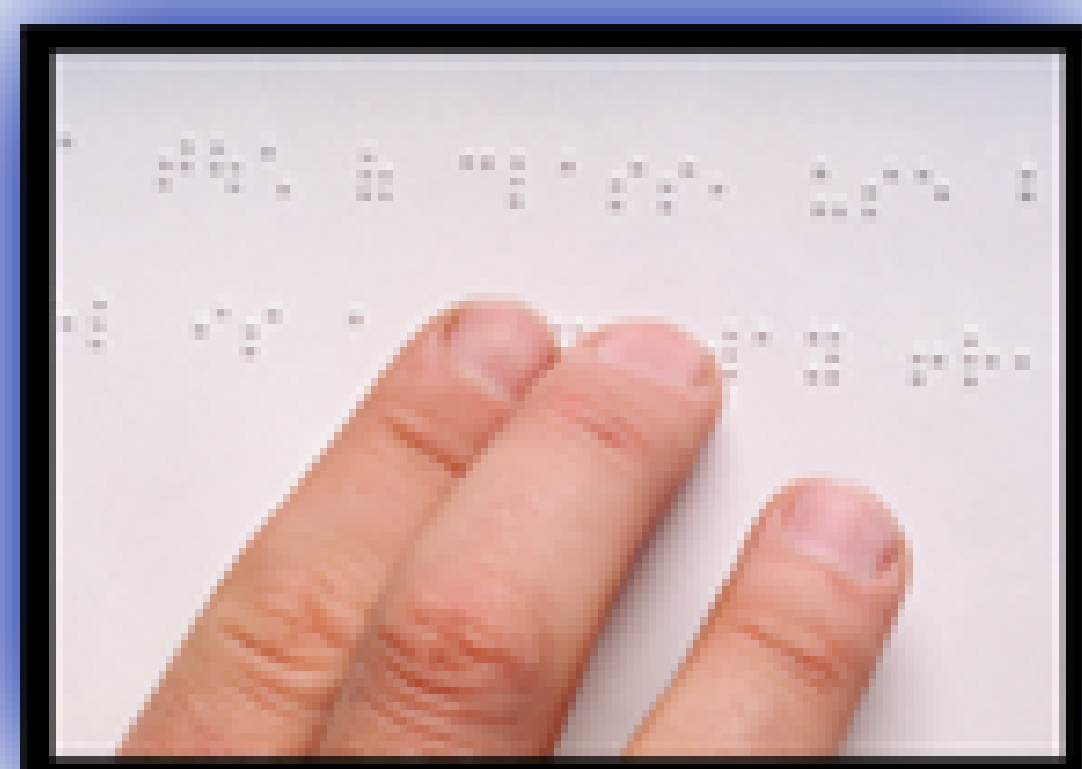
### How V-Braille works:

- The smartphone's touchscreen is divided into six regions, which each contain a dot to represent the standard Braille cell
- Dots that should be raised in standard Braille are colored white and cause the phone to vibrate when touched.



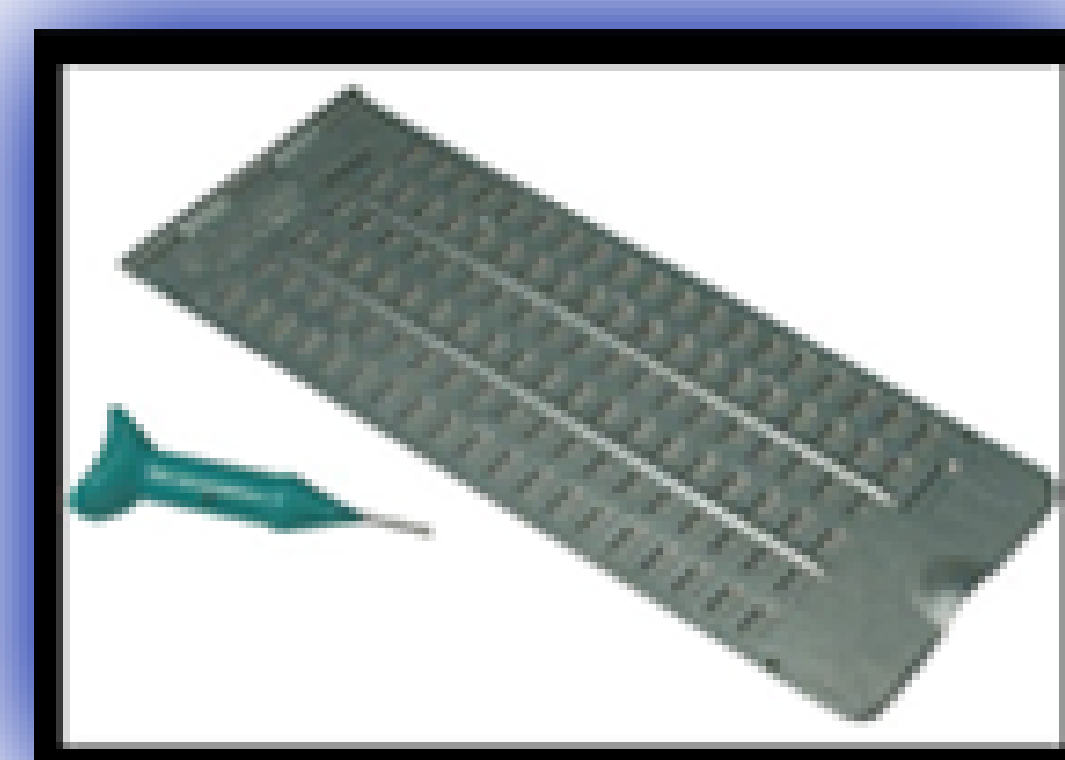
The letter "o" in V-Braille.

## Applications:



### V-B-Reader:

Player reads symbols in V-Braille and tries to correctly identify what letters they are.

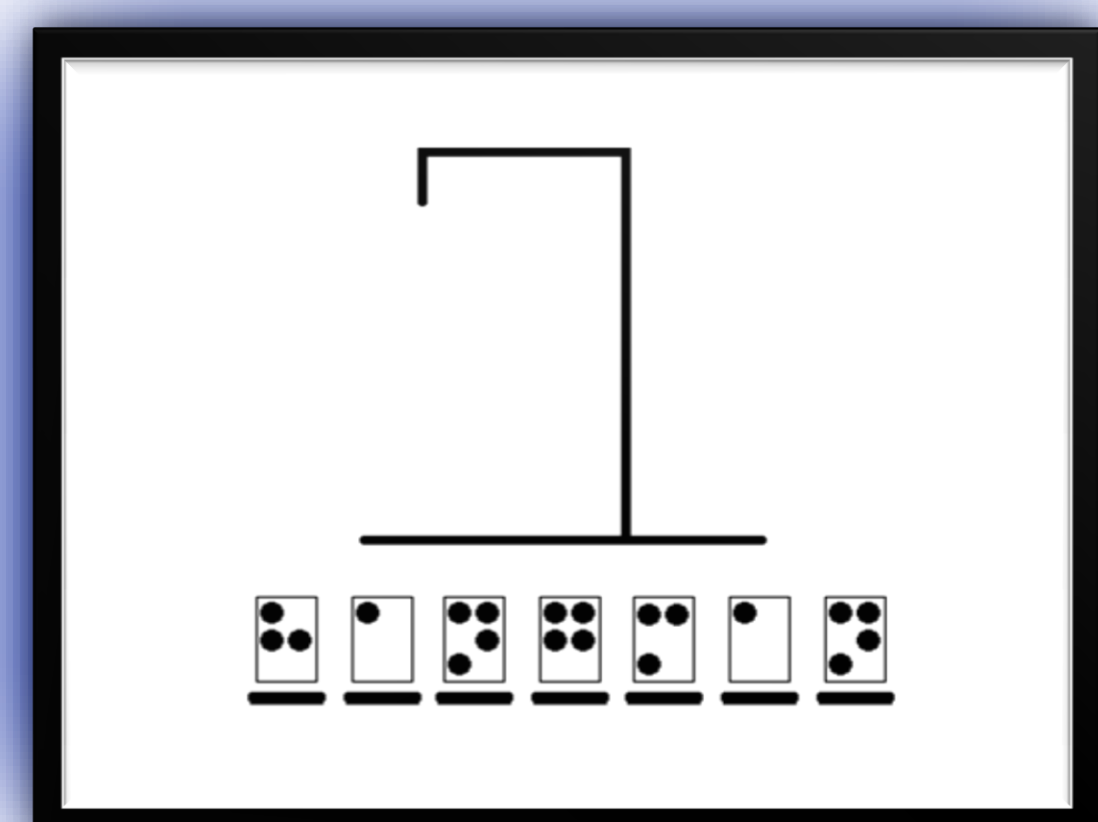


### V-B-Writer:

Player is verbally presented with a letter and tries to enter it in V-Braille

### V-B-Hangman:

Play hangman by entering letter guesses in V-Braille.



### V-B-Ghost:

Players take turns adding on letters using V-Braille to a word fragment until someone loses by spelling a complete word.

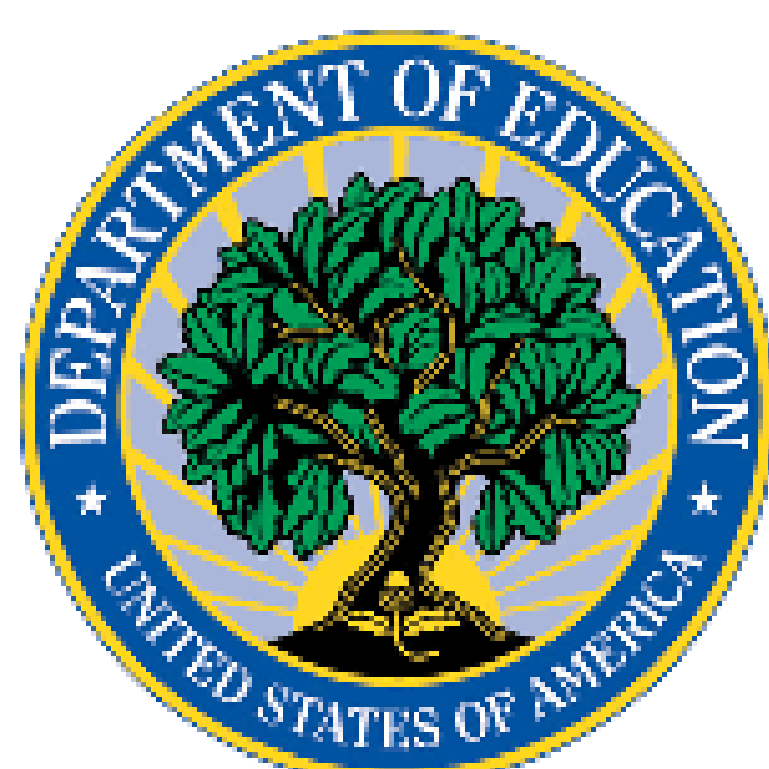


## Interested in Participating?

We are currently looking for research participants (children ages 5-12, who are blind or have low vision, and their parents) to participate in a study to assess how effective V-Braille is as a learning tool. If you are interested, please contact us:

**Lauren Milne (Graduate Student)**  
milnel2@cs.washington.edu

**Professor Richard Ladner**  
ladner@cs.washington.edu



Funded by the  
Department of Education,  
Technology and Media  
Services for Individuals  
with Disabilities  
(H327A100014)



**dub** design:  
use:  
build:  
university of washington

