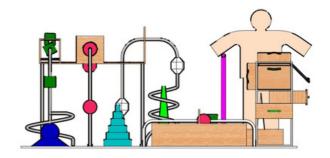
## COGNOREHAB INC. 2022

#### COGNOKIDS



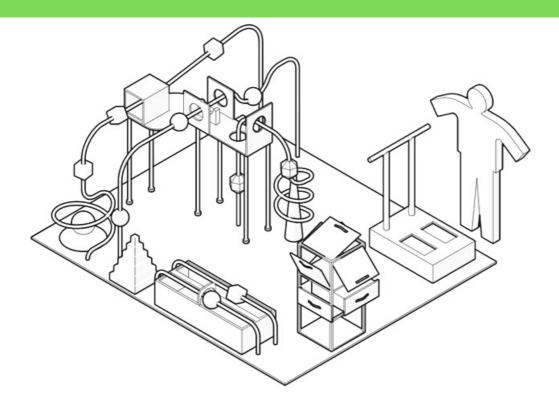
#### PLAY GROUND



20 Prepositions & Directions 4 Sets of Equipment Digital Sound System 2018 US patent



### HISTORY BEHIND THE IDEA

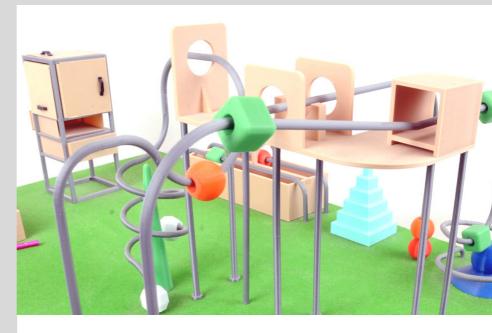


**In order** to teach many linguistic concepts such as name, verb, adjective, etc., different teaching aid instruments have been supplied that have facilitated learning of these concepts. One of the less studied categories is teaching of prepositions, especially directional concepts such as up, down, below, on, across, etc. Generally these linguistic concepts are learned through sight, and even seeing persons learn these concepts later than other concepts such as names and verbs. In some occasions, even adults face some problems in understanding, recognizing, and reciting examples of prepositions (such as across, beside and front).

Researches shows the differences between linguistic and non-linguistic categorization in students with damaged sight in comparison with seeing students. This research also shows that among linguistic concepts, the necessity of paying attention to connection categories, especially prepositions, is more manifest. Firstly, because these concepts reflect mainly space connections in a language and are mainly learned through sight, blind persons face obstacles in understanding them. Secondly, among different types of linguistic and non-linguistic categories, prepositions are among linguistic ones that are even learned by seeing persons later than other concepts (such as name and verb). On some occasions, even adults may face some trouble in understanding, recognizing, and reciting examples of this type of concept. Based on above elements, there is a need for a comprehensive device for visual, tactile and vocal teaching of directional and motional concepts to children. Therefore, a teaching device has been developed to fill this need. Dr. T. Mahmoudi, Comparison of the categorization of concepts in seeing and blind persons, Postgraduate Thesis on General Philology, Shahid Beheshti University, Tehran, 2011, Categorization differences between seeing and blind persons, Quarterly of Novelties in Cognitive Sciences, 2013.

A teaching device according to the present disclosure may be designed in a way to include most or all directional concepts, i.e. categories further to prepositions such as adjectives. In some instances, these directional concepts are not prepositions; they are adjectives that are considered as an associating category according to the theory of Langacker. Further, usage of this device is not limited to blind persons; seeing persons as well as students who suffer from other disabilities may use it.

Cognokids Playground is comprehensive tool for teaching children directional and movement concepts in a visual, tactile and audio way includes a base plate with four sections of nested bars, a cross-section box, а balance platform and a push and pull cabin installed on it and equipped with an electronic audio system. It is for teaching and distinguishing more than 20 directional and movement concepts to sighted, partially sighted and blind children. Different parts of the device include several rods with different flat, curved, inclined and spiral shapes, and balls with different geometric shapes move in these rods. Also, various pages are embedded in the device so that the student can experience concepts such as movement and direction. In addition, the section of the balance platform to teach the concept of balance and the push and pull cabin with two drawers and five hinged doors is placed in the device to teach concepts such as pulling. pushing and axial movement. This device can be used two ways: training instructor and training with the electronic audio The system. electronic section includes electronic circuits and micro switches for broadcasting audio messages of concepts to students.





#### COGNOKIDS PLAYGROUND

### HOW DOES IT WORK?



• The design is a teaching device intended to teach more than 20 directional prepositions and their minute differences such (up, down, below and under) by allowing children to move the partially hollow objects (ball, cube, cones, star-shaped, cylinder shaped and pear shaped covered with different textures e.g. "porous", "rough", "smooth", "hard", "soft", "liquid", "solid", "lumpy", "gritty" etc.) across the rods while listening to the related sounds playing the name for that movement.

For example when the child raises the hollow rough cube the device will play "up" simultaneously to integrate the name of the movement with the concept acquired in his mind.

- The integrated sound system operates at the right moments for developing and triggering that concept in child's mind.
- The device is very colorful and shiny to attract children's attention.

#### SIZE AND DIMENSIONS

**Playground** 

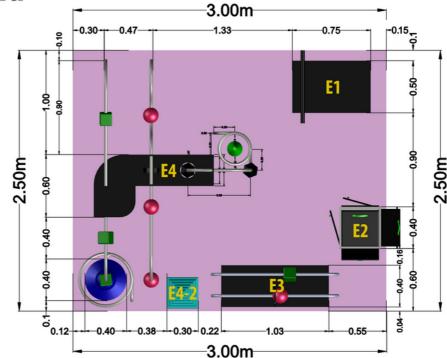
**Details** 

#### **Direction**

EI Equipment1
E2 Equipment2
E3 Equipment3

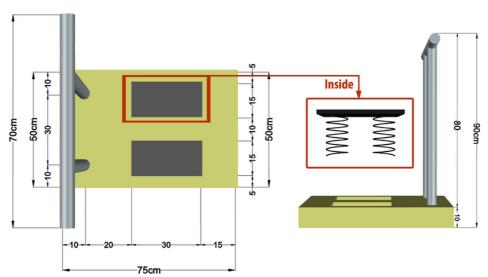
E4 Equipment4

E4-2 Equipment4-2

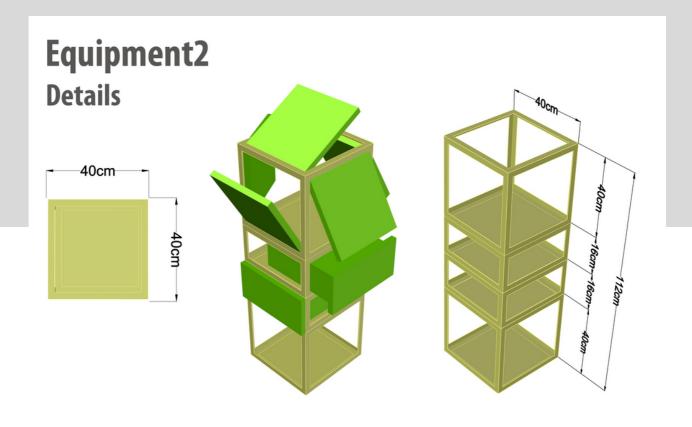


#### **Equipment1**

#### **Details**



#### SIZE AND DIMENSIONS

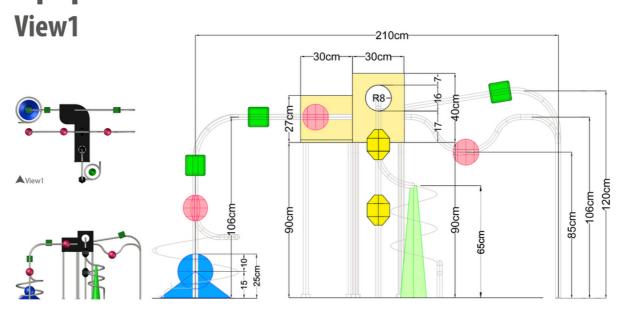


# Equipment3 Details 3D Plan 3D View 3D View

#### SIZE AND DIMENSIONS

# Equipment4 Plan

**Equipment4** 





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