Device for Teaching and Learning the Braille Alphabet

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This research is developed as a felt need on the importance of providing a tool for people with visual impairment that facilitates communication through the development of teaching and learning of the braille language and communicative skills, with playful, interactive strategies and of low cost. This device facilitates the teaching and learning of braille to visually impaired or partially sighted people, interactively, in a pleasant way, respecting their personal learning pace, their age and previous knowledge. It has an audio interaction system integrated that facilitates self-learning. The interface of the device enables simple operation and is easy to carry. The research was based on the braille learning needs of people with visual impairment, the analysis of the existence within the possibilities of learning this language, economic costs, as well as of temporal and geographical aspects; therefore, it offers a solution for all these aspects from the electronics field, through a device that allows people with blindness, the recognition of characters printed in braille, using printed cards made of low material cost and construction, easy to manipulate by the tutor or by the student due to their interactivity design features.

Awards Won: