VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM

Braille Learning Device For Visually Impaired Students

A project report submitted in partial fulfillment for the requirement in the degree of
Bachelor of Engineering
in
Electronics and Communication

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Abstract

The Visually Impaired students have to memorize various combinations assigned for different letters/words/symbols of Braille Script in order to read and write effectively. This method may infuse inferiority complex in visually impaired students at early stage of education as it seems to be a burden. As children like playing more than studying, it is imperative for any teaching method to infuse a sense of playing while learning in the visually impaired students. The integration of physical activity and hearing can facilitate easy learning of Braille Script.

Our proposed device successfully fulfils the above said objective. It consists of a keypad which is based on the Braille matrix (3*2 matrix). The user enters combination of keys in compliance with internationally accepted Braille matrix, the device in turn pronounces corresponding letter of English alphabet.It also provides the user with speech input facility that enables the user to know the Braille combination of the letter which he/she speaks. Our project is an attempt to utilize technology to educate the visually impaired students.