ABSTRACT

This research is aimed at (1) getting Braille editor by employing word processor, Microsoft word 2000, (2) getting an alternative of cheap and portable braille embosser by modifying hardware printer LX-800, and (3) testing the legibility of Braille letters of the Microsoft word editor after being printed by using printer LX-800 modified to be Braille embosser.

The research items are letters, numbers, punctuation marks, simple mathematical symbols and simple Indonesian sentences which have been printed by using printer LX-800 as the embosser with word processing of Microcoft Word 2000 as the braille editor. The data collection is conducted by observing the appearance of the Braille letters and by testing the legibility of the braille letters, numbers and punctuation marks in the blind people and then matching them with the Indonesian Braille code, and testing the legibility of the Indonesian sentences using the braille letters afterwards. Finally, the legibility tabulation of the braille letters is made.

The research results show that Microsoft word can be used as Braille editor by employing the application program of Visual Basic for application (VBA) embedded in the application of Microsoft word. VBA programming is done by macro recording some editing steps in the application of Microsoft word. The editing steps recorded are the steps of FindReplace, Format Font and Print. The braille letters are obtained by installing the braille font in the application of Microsoft Word. Besides the process of macro recording, the editing of the program code of the recording result is also conducted. Meanwhile, printer LX 800 can be used as braille embosser by modifying the direction of the print printer and adding it with vinyl coat on the platen printer. The result of testing the appearance on the monitor show that the conversion of the latin letters to the Braille ones is in line with the guidelines of writing Indonesian Braille. Moreover, the result of testing the legibility of braille letters in the blind people show that the format of the legible Braille letters is the font size = 28 point, font style = Bold, line spacing = double, and character spacing = expanded 4 ppt. The paper that can be used is white Padalarang paper.

In conclusion, Microsoft word can be used as Braille editor with printer LX-800 as the embosser.

Key words: Braille, embosser, font