

ABSTRACT

In Indonesia, there are various cultures that exist in various regions. The preservation of culture in each region is very dependent on the interest of the community, especially the interest of the younger generation towards the culture that exists and lives in the area, including the culture in Cirebon. The growing interest of the younger generation is also highly dependent on conservation efforts or socialization from the government and educational institutions. One of the weaknesses of the cultural socialization program is the use of an interest evaluation system in culture which has been using a subjective questionnaire method, so that there is a lot of bias.

Based on this background, a final project with the title Implementation of Spatial Selection on EEG Signals for the Cirebon Cultural Introduction Case Study was made. This final project aims to evaluate the interest of the younger generation towards Cirebon culture by utilizing EEG devices that can measure or evaluate objectively, so that the evaluation results are more accurate.

The purpose of this study was to evaluate related to the introduction of culture in Cirebon. This study uses sampling of the alpha frequency which is in the 8-13 Hz wave and also the beta frequency which is in the 13-30 Hz wave.

This research was conducted using a device called emotive epoc which was used on 14 students from SMK Telkom Bandung. This tool has 16 channels located in the respondent's head which is then used to record brain wave signals in 14 respondents which is then read using an application called Matlab. The results of the measurements were analyzed to obtain a conclusion in the form of brain activity in the temporal area associated with memory.

Keywords: Spatial Selection, EEG, Brain Waves