

EFFORTS TO REDUCE SOUND COLORS CONCEPTIONS WITH THE IMPLEMENTATION OF DIGITAL FOURIER PRINCIPLES FOR Middle School TEACHERS in Bantul

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ABSTRACT

This study aims to reduce misperceptions about color sounds for junior high school science teachers. Improvement of this misconception is needed so that teachers and students can understand which sounds produce a single frequency and which ones do not, so the concept of sound in the advanced sound material is no longer wrong. The objects studied were science teachers who were members of the junior high school science MGMP in Bantul. This research is based on the results of observations and questionnaires in the deepening Physics training program related to Color Sound using the forier transformation method. The parameters studied are activity evaluations based on the results of a survey of program participants divided into three main criteria, namely: 1) The objectives and benefits of the activity; 2) the process of providing learning materials; 3) the impression of material delivery. The results of the study prove that the deepening Physics training program in Color Sound using the forier transformation method can reduce the teachers' misconceptions regarding the concept of sound color. To better understand the concept of sound color frequency, teachers must have strong mathematical knowledge related to trigonometry and bioangan complex and be active in independent trials using voice synthesis software media.

Kata Kunci: *colour of sound,*