

## **ABSTRACT**

This final project contains of development of an educational tool and also analyzing the effect of changes of value of resistor, capacitor and the use of negative feedback on amplifier frequency response. At this day, the electronic educational tool that available still have some deficiency such as: can't experiment on different values and type of components, unable to identify the real specification of the components, to the component legs that are often damage after being used. In terms of learning, frequency response is not discussed in detail that make students difficult to understand it. Base on the problem that appear, necessarily an update is needed on the practicum kit that aim to help students experimenting and to solve the component legs damaged. As for this final project, it emphasizes the analysis of the effects of resistance, capacitance, and negative feedback to observe the linearity percentage and frequency response using the educational kit that have been designed. The final task is going to use experimental research method to prove the relationship between the theory and practice. The result of this final task is the creation of renewal of electronic learning aids which are equipped with guidelines, usage rules, and worksheets. And also to get the linearity percentage and the working area of an amplifier from the effect of changes of value of resistance, capacitance, and the use of negative feedback on the amplifier circuit.

**Keyword:** learning aids, negative feedback, frequency response