

ABSTRACT

Elsa Oktapiani (2022). **Improving Mathematical Connection Ability and Self-esteem of Junior High School Students through the Connecting, Organizing, Reflecting, Extending (CORE) Learning Model assisted by GeoGebra**

Mathematical connections can be connected between mathematical concepts so that students will see mathematics as a unified whole. One alternative model that can be used to improve students' mathematical connection skills and self-esteem is the connecting, organizing, reflecting, extending (CORE) learning model assisted by GeoGebra. This study aims to: (1) To find out whether students who have the ability to connect mathematically with the the connecting, organizing, reflecting, extending (CORE) learning model assisted by GeoGebra are better than students who receive conventional learning models; (2) To find out whether the increase in self-esteem of students who received the Connecting, Organizing, Reflecting, Extending (CORE) learning model assisted by GeoGebra was better than students who received conventional learning; (3) To find out whether there is a relationship between mathematical connection ability and self-esteem of students who received the connecting, organizing, reflecting, extending (CORE) learning model assisted by GeoGebra. The method used is a quasi-experimental method with a nonequivalent control group design. The subjects of this study were students of class VIII SMP PGII 1 Bandung. The instrument used in this research is a description of mathematical connection ability and self-esteem scale in the form of a statement. The results showed that: (1) The improvement of mathematical connection skills of students who received the Connecting, Organizing, Reflecting, Extending (CORE) learning model assisted by GeoGebra was better than students who received conventional learning; (2) The self-esteem of students who received the connecting, organizing, reflecting, extending (CORE) learning model assisted by GeoGebra was better than students who received conventional learning. (3) There is a relationship between mathematical connection ability and self-esteem of students who receive the connecting, organizing, reflecting, extending (CORE) learning model assisted by GeoGebra.

Keywords: Connecting, Organizing, Reflecting, Extending (CORE) assisted by GeoGebra, mathematical connection ability, Self-esteem.