## **ABSTRACT**

## IMPROVING MATHEMATICAL REASONING ABILITY AND SELF-EFFICACY STUDENT OF SENIOR HIGH SCHOOL THROUGH

CORE (Connecting, Organizing, Reflecting, Extending) MODEL

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The purpose of this research was determine to 1) to knowing whether increase of mathematical reasoning ability student given CORE (Connecting, Organizing, Reflecting, Extending) model is higher than student given PBL (Problem Based Learning) model, 2) to knowing whether self-afficacy student given CORE (Connecting, Organizing, Reflecting, Extending) model is better than student given PBL (Problem Based Learning) model, 3) to knowing whether there is a correlation between mathematical reasoning ability and self-efficacy student through the CORE (Connecting, Organizing, Reflecting, Extending) model. The research method used is quasi experiment with non equivalent control group design. The subject of this research were two classes from Class XI SMA Negeri 12 Bandung school year 2020-2021 on selected according to spesific considerations with a sample of 72 students, including 36 students of class XI MIPA 4 as the experimental class who given treated CORE (Connecting, Organizing, Reflecting, Extending) model, and 36 students of class XI MIPA 3 as the control class who given treated conventional learning model is PBL (Problem Based Learning). The research instrument used was a mathematical reasoning ability test and a quisioner of selfefficacy. The data collected processed using assistence software IBM SPSS 26 for Windows. Based on the analysis of research results data, the conclusion is 1) increase of mathematical reasoning ability student who given CORE (Connecting, Organizing, Reflecting, Extending) model is higher than student who given PBL (Problem Based Learning) model, 2) Self-efficacy student who given CORE (Connecting, Organizing, Reflecting, Extending) model is better than student who given PBL (Problem Based Learning) model, 3) there is a positive correlations between mathematical reasoning ability and self-efficacy student through the CORE (Connecting, Organizing, Reflecting, Extending) model.

**Keyword:** Mathematical Reasoning Ability, Self-Efficacy, CORE (*Connecting, Organizing, Reflecting, Extending*) Model