

Application of MASTER Learning Model to Mathematical Reasoning and Self-Esteem Ability of High School Students

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ABSTRACT

Mathematical and Self-Esteem of The high school students are still relatively low. One of the learning models that can be used to improve the ability of mathematical reasoning and self-esteem of high school students is the MASTER Model. The purpose of this research is to: 1) to find out whether the improvement of students' mathematical reasoning using the application of MASTER learning model is higher than the students who get the learning of Discovery Learning; 2) to find out if self esteem of high school students using MASTER learning model is better than students using Discovery Learning model of learning. This study uses quasi-experimental method. The research design used is the pretest-postes group design. Population in this research is all student of class X SMA Negeri 1 Maja. The sample of this research is class X IPS-4 as experiment class and class X IPS-3 as control class. The instrument used is a test of students' mathematical reasoning abilities and a Self-Esteem questionnaire. Processing and data analysis using Two Independent Sample t-Test and Mann Whitney test with Microsoft excel software and IBM SPSS statistic 23.0 for Window software. The results of the study showed that 1) improvement of students' mathematical reasoning using MASTER model is higher than students using MASTER model with Discovery Learning approach, 2) improvement of students using MASTER model higher than students using MASTER model with Discovery Learning approach. Thus the MASTER model can be used as an preference for teachers in learning in the classroom.

Keywords: MASTER learning model, Mathematical reasoning, *self-esteem*.