

ABSTRACT

Dina Rahmawati. (2018). Improving Ability of Abstraction and Mathematical Disposition of Class XI High School Students Through Brain Based Learning Strategies.

This research is motivated by the importance of the ability of abstraction and mathematical disposition in the formation of mathematical concepts and the fact of the low ability of abstraction and mathematical disposition of students. The purpose of this study was to determine (1) the ability of mathematical abstraction of students who obtain a better Brain Based Learning strategy than students who obtain Conventional learning, (2) increasing the ability of mathematical abstraction students who obtain higher Brain Based Learning strategies than students who obtain Conventional learning, (3) mathematical dispositions of students who obtain better Brain Based Learning strategies than students who obtain Conventional learning, (4) correlation between abilities Mathematical abstraction and mathematical disposition of students who obtain Brain Based Learning strategies. This study uses a quasi-experimental method. The population in this study were students of class XI SMA Negeri 17 Bandung in 2018-2019. The research sample is two class students of SMP Negeri 17 Bandung as many as two classes chosen randomly according to class. The instrument used in this study is a mathematical abstraction ability test in the form of a description and mathematical disposition scale. The instrument has been tested and the results are all significant. The data collected is then processed using SPSS 24.0 for Windows software.. Based on the results of this study, it can be concluded that, (1) the ability of mathematical abstraction of students who obtain a Brain Based Learning strategy is better than students who obtain Conventional learning, (2) an increase in the ability of mathematical abstraction of students who obtain a higher Brain Based Learning strategy than students who get Conventional learning, (3) the mathematical disposition of students who get a better Brain Based Learning strategy than students who obtain Conventional learning, (4) there is a correlation between the ability of mathematical abstraction and mathematical disposition of students who obtain Brain Based Learning strategies.

Keywords: Mathematical Abstraction and Disposition Ability, Brain Based Learning (BBL).