## **ABSTRACT**

## THE USE OF CROSSWORD PUZZLE GAME AND CLUSTERING TECHNIQUE ON EXTROVERT AND INTROVERT STUDENTS' VOCABULARY SIZE

By

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The objective of this research was to investigate the difference of vocabulary size between extrovert and introvert students who were taught through crossword puzzle game and clustering technique at the first year of SMA Negeri 1 Purbolinggo in 2016/2017 academic year. The research took two classes in the school as the sample. In determining the sample, the classes were selected randomly by using lottery. The researcher used two classes as experimental classes. The samples were X MIA 3 and X MIA 4, which consisted of 36 students for each. The research used factorial design. Based on the findings of the data analysis, it could be drawn that there was an interaction between the techniques and the personalities in students' vocabulary size. In this case, the interpretation would be that the Ho of no difference between the two techniques could be rejected. The techniques differed significantly with the students performing better in clustering technique. The Ho of no difference for personality could also be rejected. Extroverts did better than introverts regardless of the techniques. Therefore, using crossword puzzle game and clustering technique was a perfect way for extrovert students to improve their vocabulary size since their score increased through those techniques.