

**COMPARISON OF STUDENTS' LEARNING OUTCOME AND  
ACTIVITY IN EXCRETORY SYSTEM TOPIC USING  
MAKE A MATCH AND WORD SQUARE MODEL  
FOR GRADE XI SMA SWASTA AL-ULUM  
ACADEMIC YEAR 2013/2014**

**Chairany Rizka  
4103342012**

**ABSTRACT**

This quasi experiment research aims to investigate the comparison of student learning outcome and activity between make a match and word square model on the topic of excretory system. The population of this study was all of grade XI IPA students of SMA Swata AL-ULUM. The sample was taken by using cluster random sampling technique and was obtained the sample for 30 students of word square class (XI IPA 1) and 30 students of make a match class (XI IPA 2). The instruments used to obtain the data were observation sheet as non-test instrument and cognitive test in form of multiple choices as test instrument. The result of data analysis showed that pretest in word square class ( $48.06 \pm 16.32$ ) and pretest in crossword puzzle class ( $47.95 \pm 16.67$ ) The result of hypothesis test for posttest showed that  $t_{count} = 5.31125 > t_{table} = 2.664$  at the level significance of 0.01, means that  $H_a$  was accepted and  $H_0$  was rejected. It can be concluded that there is a big significant difference of student learning outcome between is taught by using Make a match and Word square model. Then, t-test of observation results showed that students' activity in both research classes is not significantly different. The students in word square class have the average percentage of 66% and in make a match 65% . The result of hypothesis test for student activity showed that  $t_{count} = 0.320 < t_{table} = 2.664$  It means that there is no difference of student learning activity in both of classes. On the whole, outcome in learning human excretory system (kidney) subtopic that taught by word square model is higher than student learning outcome that taught by make a match in SMA Swasta AL-ULUM Medan academic year 2013/2014.

Keywords: *Word square Model, Make a Match Model, students' activity, learning outcome.*