

**THE EFFECT OF APPLYING SCIENTIFIC APPROACH BY USING
MNEMONIC TECHNIQUE INTO STUDENTS' LEARNING
OUTCOME AND RETENTION ON HUMAN
REPRODUCTIVE SYSTEM TOPIC AT
GRADE XI SCIENCE SMA N 5
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ABSTRACT

The study aims to know the effect of student learning outcome and its retention through using Scientific Approach by using mnemonic technique on human reproductive system in class XI MIA SMA Negeri 5 Medan Academic Year 2015/2016. The population of this research was all students in class XI MIA SMA Negeri 5 Medan totaling 376 students. The sample was taken by using purposive sampling and was obtained the sample for 37 students of mnemonic class (XI MIA 7). The instrument of research was student's learning outcome test in multiple choice form consist of 30 questions which has been validated by expert. The result of data analysis show that post test in mnemonic class (79.08) and conventional class (70.59). After t-test was carried out by using significant degree $\alpha = 0.05$, it was obtained that $t_{\text{count}} = 4.28$ and $t_{\text{table}} = 1.9935$, so $t_{\text{count}} > t_{\text{table}}$ ($4.28 > 1.9935$). It means that there is significant difference between student learning outcome for mnemonic class and conventional class. Then, for retention test the result show that average value in mnemonic class (65.62) and conventional class (42.97). After t-test was carried out by using significant degree $\alpha = 0.05$, it was obtained that $t_{\text{count}} = 2.66$ and $t_{\text{table}} = 1.9935$, so $t_{\text{count}} (2.66) > t_{\text{table}} (1.9935)$. It means that there is significant difference between students' retention in mnemonic class and conventional class. It was concluded that students' learning outcome and retention is better using Scientific Approach by using mnemonic technique than conventional class that taught without mnemonic technique. This study conclude that teacher can use this technique to increase students' learning outcome and retention especially on human reproductive system topic in Biology subject matter.

Keywords: *Mnemonic Technique, Conventional, Learning Outcome, Retention.*