ABSTRACT

Frendy Jonathan Sinulingga. Comparison of Students' Learning Outcome and Memory Retention Taught by Various Media on Spermatophyte Topic Grade X SMA Negeri 1 Sidikalang 2013/2014 Academic Year.

This research is aim to know the effect and to compare which media is the best learning media on students' learning outcome and memory retention on Spermatophytes topic. The research was held in SMAN 1 Sidikalang 2013/2014 academic years. The population of this research is 333 students of Grade X and the sample was taken randomly with cluster random sampling consist of 26 students who were taught with audiovisual media (X-1), 26 students who were taught with mind mapping media (X-2), and 25 students who were taught using two dimension image media (X-3). Thirty multiple choice and four essay questions were used to measure students' learning outcome and 21 days after post-test, the same test was given to measure students' memory retention. The result showed that learning media significantly affected the students' learning outcome (F = 36.25; P = 0.00) and students who were taught with audiovisual media, 95.46 \pm 2.74 ($\overline{X} \pm$ SD) was significantly higher than students who were taught with two dimension image media, 89.68 ± 6.12 and students who were taught with two dimension image media was significantly higher than students who were taught with mind mapping media 85.16 ± 46 . The result showed that learning media was significantly affected the students' memory retention (χ^2 = 47.98; P = 0.00) and students who were taught with audiovisual media, $81.46 \pm$ 3.43 ($\overline{X} \pm SD$) was significantly higher than students who were taught with mind mapping media, 76.63 ± 4.38 and students who were taught with mind mapping media was significantly higher than students who were taught with two dimension image media, 61 ± 9.22 . So it can be concluded that learning media was significantly affected students' learning outcome and memory retention on grade X SMAN 1 Sidikalang 2013/2014 academic years.

Keyword: Learning media, learning outcome, memory retention