ABSTRACT

This study aims to determine the effect of implementation e-learning to student cognitive learning outcomes on vertebrates Topic in Tenth Grade X MIA SMANegeri 4 Medan according to the material expert; education expert; design expert; teacher assessment in the field of study and responses of students. The type of research used is research and experiment. This research was conducted April-July 2020 at SMAN 4 Medan. Subjects in this study were students of Tenth Grade MIA 1 experiment group and MIA 3 control group SMAN 4 Medan, the object of this research was in *Portal RumahBelajar* and Google Classroom, which had been producted, validated by material expert, education expert, and design expert. The results of the study showed that the average of the material expert assessment in experiment group was 85,00 and control group 78,00. The results of the study, there is an effect of the use of *RumahBelajar* on student learning outcomes on Vertebrate material in Class X MIA SMA Negeri 4 Medan.

Key words : Student Learning Outcomes, E-learning, Vertebrate