

ABSTRACT

RESTU PASA AMALIA. 2026. **THE EFFECT OF GENIALLY MEDIA-ASSISTED DISCOVERY LEARNING ON STUDENTS' SCIENCE LITERACY AND SELF-REGULATION ON BIOTECHNOLOGY MATERIAL (Experimental Study in Grade X of SMA Negeri 1 Manonjaya, Academic Year 2025/2026)**. Department of Biology Education. Faculty of Teacher Training and Education, Siliwangi University.

Scientific literacy and self-regulation are skills that need to be developed by students in the biology learning process, especially in biotechnology materials related to everyday life. Therefore, this study aims to determine the effect of discovery learning assisted by genially media on scientific literacy and self-regulation of students. This study was conducted in August 2025 - February 2026. This study used a quantitative approach with a quasi-experimental method and a nonequivalent control group design. The population of this study included all grade X students of SMA Negeri 1 Manonjaya, consisting of 12 classes totaling 501 students. The sample was taken using a purposive sampling technique, so that classes X-1 and X-2 were selected as research samples. The determination of the experimental and control classes was carried out by randomization, so that class X-1 was selected as the experimental class, and X-2 as the control class. The instrument used for the scientific literacy test used a multiple choice of 35 questions, while for the non-self-regulation test, a questionnaire of 29 statements was used. The analysis technique used was the ANCOVA test where the data obtained were normally distributed. Based on the results of the hypothesis testing, a significance value of 0.009 was obtained for scientific literacy and 0.007 for self-regulation. Both values are smaller than the significance level of 0.05. The findings of this study indicate that scientific literacy and self-regulation have increased in the experimental class. Thus, it can be concluded that there is an effect of discovery learning assisted by genially media on scientific literacy. Likewise, there is an effect of discovery learning assisted by genially media on students' self-regulation in biotechnology material in class X of SMA Negeri 1 Manonjaya in the 2025/2026 academic year.

Keywords: *Discovery Learning, Genially, Scientific Literacy, Self Regulation*