

ABSTRAK

RENDRA JULNANDA PRATAMA. 2026. **PENGARUH METODE TUTOR SEBAYA BERBANTUAN E-MODUL TERHADAP KETERAMPILAN KOLABORASI DAN RETENSI PADA MATERI KEANEKARAGAMAN HAYATI (Studi Eksperimen Di Kelas X SMA Negeri 1 Ciamis Tahun Ajaran 2025/2026)**. Jurusan Pendidikan Biologi. Fakultas Keguruan dan Ilmu Pendidikan, Universitas Siliwangi.

Keterampilan kolaborasi dan retensi belajar merupakan kompetensi penting yang perlu dimiliki peserta didik dalam pembelajaran abad ke-21. Namun, kedua aspek tersebut masih belum berkembang secara optimal sehingga diperlukan strategi pembelajaran yang mampu meningkatkan keterampilan kolaborasi sekaligus mempertahankan hasil belajar dalam jangka waktu tertentu. Penelitian ini bertujuan untuk mengetahui pengaruh metode tutor sebaya berbantuan e-modul terhadap keterampilan kolaborasi dan retensi belajar peserta didik pada materi Keanekaragaman Hayati. Penelitian ini menggunakan metode kuasi eksperimen dengan desain Nonequivalent Control Group Design. Populasi penelitian adalah seluruh kelas XE SMA Negeri 1 Ciamis tahun ajaran 2025/2026. Sampel ditentukan menggunakan teknik purposive sampling, yaitu kelas XE-7 sebagai kelas eksperimen yang mendapat pembelajaran Discovery Learning yang diintegrasikan dengan metode tutor sebaya berbantuan e-modul dan XE-6 sebagai kelas kontrol yang mendapat pembelajaran Discovery Learning. Instrumen penelitian berupa angket keterampilan kolaborasi Collaboration Self- Assessment Tools (CSAT) sebanyak 44 pernyataan dan tes retensi belajar sebanyak 45 soal pilihan ganda yang masing-masing sudah di validasi. Data dianalisis menggunakan Analysis of Covariance (ANCOVA). Hasil penelitian menunjukkan bahwa metode tutor sebaya berbantuan e-modul berpengaruh signifikan terhadap keterampilan kolaborasi peserta didik (Sig. 0,001) dan retensi belajar peserta didik (Sig. 0,000). Rata-rata skor keterampilan kolaborasi kelas eksperimen meningkat dari 26,72 menjadi 33,96, sedangkan kelas kontrol dari 26,76 menjadi 29,46. Rata-rata skor delayed test retensi belajar kelas eksperimen sebesar 36,87 lebih tinggi dibandingkan kelas kontrol sebesar 32,17. Dengan demikian, metode tutor sebaya berbantuan e-modul berpengaruh terhadap keterampilan kolaborasi dan retensi belajar peserta didik pada materi Keanekaragaman Hayati.

Kata Kunci: E-Modul, Keanekaragaman Hayati, Keterampilan Kolaborasi, Retensi Belajar, Tutor Sebaya.

ABSTRACT

RENDRA JULNANDA PRATAMA. 2026. ***THE EFFECT OF THE E-MODULE-ASSISTED PEER TUTORING METHOD ON COLLABORATION SKILLS AND RETENTION IN BIODIVERSITY MATERIAL (Experimental Study in Grade X Students of SMA Negeri 1 Ciamis, Academic Year 2025/2026).*** Department of Biology Education, Faculty of Teacher Training and Education, Siliwangi University.

Collaboration skills and learning retention are important competencies that students need to have in 21st-century learning. However, these two aspects have not yet developed optimally, so a learning strategy is needed that can improve collaboration skills while maintaining learning outcomes over a certain period. This study aims to determine the effect of the e-module-assisted peer tutoring method on students' collaboration skills and learning retention in the Biodiversity material. This study used a quasi-experimental method with a Nonequivalent Control Group Design. The study population was all XE classes of SMA Negeri 1 Ciamis in the 2025/2026 academic year. The sample was determined using a purposive sampling technique, namely class XE-7 as the experimental class that received Discovery Learning learning integrated with the e-module-assisted peer tutoring method and XE-6 as the control class that received Discovery Learning learning. The research instruments were a Collaboration Self-Assessment Tools (CSAT) collaboration skills questionnaire consisting of 44 statements and a learning retention test consisting of 45 multiple-choice questions, each of which had been validated. Data were analyzed using Analysis of Covariance (ANCOVA). The results of the study showed that the e-module-assisted peer tutoring method had a significant effect on students' collaboration skills (Sig. 0.001) and student learning retention (Sig. 0.000). The average collaborative skill score of the experimental class increased from 26.72 to 33.96, while the control class increased from 26.76 to 29.46. The average delayed test score for learning retention of the experimental class was 36.87, higher than the control class of 32.17. Thus, the e-module-assisted peer tutoring method had an effect on students' collaboration skills and learning retention in the Biodiversity material.

Keywords: *E-Modules, Biodiversity, Collaboration Skills, Learning Retention, Peer Tutoring.*