

ABSTRAK

NISA KOMALA. 2026. **PENGARUH MODEL *INQUIRY BASED LEARNING* DENGAN PENDEKATAN *DEEP LEARNING* TERHADAP PEMAHAMAN KONSEPTUAL DAN KEMAMPUAN BERPIKIR KRITIS PESERTA DIDIK PADA MATERI KEANEKARAGAMAN HAYATI** (Studi Eksperimen Kelas X SMA Negeri 1 Cihaurbeuti Tahun Ajaran 2025/2026). Jurusan Pendidikan Biologi, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Siliwangi, Tasikmalaya.

Pada abad ke-21, proses pembelajaran dituntut untuk mampu mengembangkan kemampuan peserta didik dalam memahami konsep secara mendalam serta melatih kemampuan berpikir kritis melalui pembelajaran yang bermakna. Salah satu upaya yang dapat dilakukan yaitu dengan menerapkan model *inquiry based learning* yang dipadukan dengan pendekatan *deep learning* dalam proses pembelajaran. Penelitian ini bertujuan untuk mengetahui pengaruh model *inquiry based learning* dengan pendekatan *deep learning* terhadap pemahaman konseptual dan kemampuan berpikir kritis peserta didik pada materi keanekaragaman hayati di kelas X SMA Negeri 1 Cihaurbeuti tahun ajaran 2025/2026. Metode yang digunakan adalah quasi eksperimen. Penelitian ini dilaksanakan di SMA Negeri 1 Cihaurbeuti tahun ajaran 2025/2026 dengan populasinya sebanyak 12 kelas dengan 572 peserta didik. Sampel diambil berdasarkan teknik *purposive sampling* sehingga terpilih kelas X-E4 sebagai kelas eksperimen dan X-E6 sebagai kelas kontrol. Teknik pengumpulan data dilakukan dengan menggunakan tes pemahaman konseptual sebanyak 30 soal pilihan majemuk dan tes kemampuan berpikir kritis sebanyak 12 soal uraian. Data penelitian dianalisis melalui uji prasyarat analisis yang meliputi uji normalitas menggunakan metode Shapiro-Wilk dan uji homogenitas menggunakan uji *Levene Statistic* dengan bantuan software IBM SPSS 26 for Windows. Hasil uji prasyarat menunjukkan data berdistribusi normal dan homogen sehingga uji hipotesis dilanjutkan menggunakan uji ANCOVA. Hasil penelitian menunjukkan nilai signifikansi sebesar 0,001 pada pemahaman konseptual dan 0,001 pada kemampuan berpikir kritis, di mana nilai signifikansi lebih kecil dari 0,05 sehingga H_0 ditolak. Dengan demikian, dapat disimpulkan bahwa terdapat pengaruh model *inquiry based learning* dengan pendekatan *deep learning* terhadap pemahaman konseptual peserta didik pada materi keanekaragaman hayati di kelas X SMA Negeri 1 Cihaurbeuti tahun ajaran 2025/2026, dan terdapat pengaruh model *inquiry based learning* dengan pendekatan *deep learning* terhadap kemampuan berpikir kritis peserta didik pada materi keanekaragaman hayati di kelas X SMA Negeri 1 Cihaurbeuti tahun ajaran 2025/2026.

Kata Kunci: *Inquiry Based Learning*, *Deep Learning*, Pemahaman Konseptual, kemampuan Berpikir Kritis.

ABSTRACT

NISA KOMALA. 2026. **THE EFFECT OF THE INQUIRY-BASED LEARNING MODEL WITH A DEEP LEARNING APPROACH ON STUDENTS' CONCEPTUAL UNDERSTANDING AND CRITICAL THINKING SKILLS IN BIODIVERSITY MATERIAL (An Eksperimental Study of Grade X Students at SMA Negeri 1 Cihaurbeuti, Academic Year 2025/2026).**

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In the 21st century, the learning process is expected to develop students' ability to understand concepts deeply and improve critical thinking skills through meaningful learning. One of the efforts that can be implemented is the application of the inquiry-based learning model combined with a deep learning approach in the learning process. This study aimed to determine the effect of the inquiry-based learning model with a deep learning approach on students' conceptual understanding and critical thinking skills in biodiversity material for tenth-grade students at SMA Negeri 1 Cihaurbeuti in the 2025/2026 academic year. This research employed a quasi-experimental method. The study was conducted at SMA Negeri 1 Cihaurbeuti in the 2025/2026 academic year with a population of 12 classes consisting of 572 students. The samples were selected using a purposive sampling technique, resulting in class X-E4 as the experimental class and class X-E6 as the control class. Data collection techniques were conducted using a conceptual understanding test consisting of 30 multiple-choice questions and a critical thinking skills test consisting of 12 essay questions. The data were analyzed through prerequisite tests, including the normality test using the Shapiro–Wilk method and the homogeneity test using Levene's Statistic test with the assistance of IBM SPSS 26 for Windows software. The prerequisite test results indicated that the data were normally distributed and homogeneous; therefore, hypothesis testing was continued using the ANCOVA test. The results showed a significance value of 0.001 for conceptual understanding and 0.001 for critical thinking skills, where both significance values were lower than 0.05, indicating that H_0 was rejected. Therefore, it can be concluded that the inquiry-based learning model with a deep learning approach had a significant effect on students' conceptual understanding and critical thinking skills in biodiversity material for tenth-grade students at SMA Negeri 1 Cihaurbeuti in the 2025/2026 academic year.

Keywords: *Inquiry-Based Learning, Deep Learning, Conceptual Understanding, Critical Thinking Skills.*