

ABSTRAK

“PERSEPSI MAHASISWA PENDIDIKAN BIOLOGI UNIVERSITAS SANATA DHARMA TERHADAP PEMANFAATAN GENERATIVE AI DALAM PROSES BELAJAR BIOLOGI”

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Perkembangan teknologi kecerdasan buatan, khususnya Generative AI, telah membawa perubahan dalam cara mahasiswa mengakses dan memahami materi pembelajaran. Dalam konteks pendidikan biologi, mahasiswa menghadapi tantangan dalam memahami konsep yang kompleks dan dinamis. Generative AI menawarkan solusi berupa penyajian informasi yang cepat, adaptif, dan interaktif. Penelitian ini bertujuan untuk mendeskripsikan persepsi mahasiswa terhadap penggunaan Generative AI dalam proses belajar biologi serta mengidentifikasi manfaat dan tantangan yang mereka alami selama proses pembelajaran berlangsung.

Penelitian ini menggunakan pendekatan *mixed methods* dengan desain *sequential explanatory*. Data kuantitatif diperoleh melalui kuesioner, sementara data kualitatif diperoleh melalui wawancara mendalam. Hasil penelitian menunjukkan bahwa sebagian besar mahasiswa memiliki persepsi positif terhadap penggunaan Generative AI. Tiga dari empat indikator persepsi berada dalam kategori “baik”, sementara efektivitas berada dalam kategori “cukup baik”. Mahasiswa merasakan manfaat seperti kemudahan memahami materi, efisiensi waktu, dan peningkatan keaktifan dalam diskusi. Namun, tantangan seperti risiko informasi tidak akurat dan ketergantungan terhadap AI juga ditemukan. Penelitian ini menegaskan bahwa Generative AI berpotensi menjadi alat bantu pembelajaran yang efektif jika digunakan secara kritis.

Kata Kunci: Generative AI, biologi, persepsi mahasiswa, AI dalam pendidikan

ABSTRACT

**“BIOLOGY EDUCATION STUDENTS’ PERCEPTIONS AT SANATA
DHARMA UNIVERSITY OF THE USE OF GENERATIVE AI
IN THE BIOLOGY LEARNING PROCESS”**

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The development of artificial intelligence technology, particularly Generative AI, has transformed how students access and understand learning materials. In the context of biology education, students face challenges in grasping complex and dynamic concepts. Generative AI offers solutions by providing fast, adaptive, and interactive information delivery. This study aims to describe students' perceptions of using Generative AI in biology learning and to identify the benefits and challenges they experience throughout the learning process.

This research employed a mixed-methods approach with a sequential explanatory design. Quantitative data were obtained through questionnaires, while qualitative data were gathered via in-depth interviews. The results show that most students have a positive perception of using Generative AI. Three out of four perception indicators fall into the “good” category, while the effectiveness indicator falls into the “fair” category. Students perceived benefits such as easier understanding of material, time efficiency, and increased participation in discussions. However, challenges such as the risk of inaccurate information and dependency on AI were also found. This study concludes that Generative AI has the potential to be an effective learning tool when used critically.

Keywords: *Generative AI, biology, student perception, AI in education*