

**PERSEPSI GURU DAN SISWA TERHADAP PEMANFAATAN
KECERDASAN BUATAN DALAM PEMBELAJARAN JURUSAN
TEKNIK MESIN DI SMKN 3 SINGARAJA**

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ABSTRAK

Penelitian ini bertujuan menganalisis persepsi guru dan siswa terhadap pemanfaatan kecerdasan buatan (AI) dalam pembelajaran Jurusan Teknik Mesin di SMKN 3 Singaraja. Penelitian menggunakan pendekatan kualitatif eksploratif dengan teknik purposive sampling. Data dikumpulkan melalui wawancara semi terstruktur, observasi non-partisipan, dan dokumentasi, kemudian dianalisis menggunakan model Miles dan Huberman. Hasil penelitian menunjukkan bahwa guru memandang AI sebagai alat bantu yang efektif untuk memperkuat pembelajaran teori dan administrasi pembelajaran, seperti penyusunan modul ajar, RPP, dan bank soal. Namun, AI belum dapat menggantikan praktik langsung di bengkel karena keterampilan psikomotorik tetap membutuhkan bimbingan guru. Hambatan utama yang ditemukan adalah risiko ketergantungan siswa, menurunnya kemampuan berpikir kritis, serta budaya menyalin jawaban secara instan. Sementara itu, siswa memandang AI secara positif sebagai asisten belajar yang membantu memahami materi, menghitung rumus RPM, mencari panduan praktik, dan mendeteksi error pemrograman CNC. Meskipun demikian, siswa juga menyadari adanya risiko ketergantungan digital. Oleh karena itu, pemanfaatan AI perlu disertai regulasi etis, pengawasan guru, dan model asesmen yang menekankan pemahaman langsung. AI sebaiknya ditempatkan sebagai alat bantu pembelajaran, sedangkan guru tetap menjadi pengarah utama, pembentuk karakter, pengawas K3, dan instruktur praktik.

Kata kunci: Persepsi, Kecerdasan Buatan, Pendidikan Vokasi, Teknik Mesin.

**PERCEPTIONS OF TEACHERS AND STUDENTS TOWARD THE USE OF
ARTIFICIAL INTELLIGENCE IN LEARNING IN THE MECHANICAL
ENGINEERING AT SMKN 3 SINGARAJA**

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ABSTRACT

This study aims to analyze teachers' and students' perceptions of the use of artificial intelligence (AI) in learning in the Mechanical Engineering Department at SMKN 3 Singaraja. The research uses an exploratory qualitative approach with purposive sampling. Data were collected through semi-structured interviews, non-participant observation, and documentation, and then analyzed using the Miles and Huberman model. Research results show that teachers see AI as an effective tool to support learning theory and teaching administration, like creating teaching modules, lesson plans, and question banks. However, AI still can't replace hands-on practice in the workshop because psychomotor skills still need teacher guidance. The main challenges found are the risk of students becoming dependent, reduced critical thinking abilities, and a culture of instantly copying answers. Meanwhile, students view AI positively as a learning assistant that helps them understand material, calculate RPM formulas, find practical guides, and detect CNC programming errors. Even so, students are also aware of the risks of digital dependency. Therefore, the use of AI needs to be accompanied by ethical regulations, teacher supervision, and assessment models that emphasize direct understanding. AI should be placed as a learning aid, while teachers remain the main guides, character builders, safety supervisors, and practical instructors.

Keywords: Perception, Artificial Intelligence, Vocational Education, Mechanical Engineering.