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# Investigating AI Use Among Engineering Students in a Physics Course

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## Abstract

As artificial intelligence (AI) platforms increasingly integrate into higher education, understanding how students interact with them, especially in multilingual environments has become essential. This study investigates the behavior, language preference, and learning outcomes of engineering students at Polytechnic University of Tirana (PUT), using AI tools to support their studies in a university-level physics course. The research focuses on two primary dimensions: (1) how students formulate queries to AI platforms in either Albanian or English, and (2) how English language proficiency influences the quality and effectiveness of these interactions. Participants will complete an English placement test and respond to pre-and post-questionnaires about their attitudes toward AI in learning. During the course, students will receive physics-based assignments requiring the use of AI, with a requirement to submit screenshots of their AI searches and reflections on the process. The collected data will be analyzed both quantitatively (e.g., language use, query frequency) and qualitatively (e.g., type of queries, evolution of language choice, and perceived learning gains). This study contributes to the growing field of digital pedagogy by offering insights into bilingual learning environments, AI-assisted education, and the linguistic challenges faced by non-native English speakers. The results aim to inform curriculum design and AI integration strategies in STEM education, particularly in multilingual or English as a Foreign Language (EFL) context.

**Keywords**: assignements; bilingual; higher education; queries; questionnaires;