Electrifying Discoveries: Mastering Basic Electronics and Unveiling the Power of Electricity with ChatGPT

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Abstract: *This research investigates a novel educational paradigm merging interactive technology with conventional pedagogy to enhance comprehension of essential electronics and electricity concepts. The study assesses the integration of ChatGPT, a sophisticated language model, as a dynamic instructional tool, introducing learners to foundational electricity principles, electronic components, circuits, and digital systems. The research examines ChatGPT's real-time responses, evaluating their efficacy in elucidating complex topics, addressing individual queries, and adapting the learning experience to each learner's pace and preferences. Preliminary findings indicate increased engagement, deeper comprehension, and improved knowledge retention. The study's insights extend beyond immediate applications, shedding light on the potential of AI integration in education, a pivotal consideration for educators, designers, and policymakers. By harnessing ChatGPT's capabilities, this research paves the way for more effective and engaging learning experiences in basic electronics and electricity, setting a precedent for technology's intersection with education.*

Keywords: Interactive learning, Education technology, ChatGPT

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