

Augmented Reality(AR) Integration in Medical English Courses: Investigating Self-Directed Learning and AR Satisfactions among College Students

In the field of medicine, proficiency in English is crucial for global medical communication. Integrating innovative teaching methods using Augmented Reality (AR) technology into the curriculum will revolutionize traditional language instruction, allowing students to grasp the subtle differences in medical English terminology and contextual applications. AR technology offers tailored immersive and interactive experiences, particularly enriching language learning in complex domains like medicine by presenting real-life scenarios, thereby enhancing students' motivation to learn. This study focuses on exploring the impact of integrating Augmented Reality (AR) into a medical English course designed for university students whose first language isn't English (EFL), investigating its influence on medical English learning, post-class autonomous learning strategies, and perceptions regarding AR usage.

The study involves 46 university students from a medical college in central Taiwan, conducted as a quasi-experimental research with both experimental and control groups. Its aim was to assess the effects of AR technology on medical English learning, autonomous learning strategies, student satisfaction, and cognitive perceptions. By comparing pre-test and post-test results between the experimental group, where AR modules were integrated into the curriculum, and the control group following traditional teaching methods, the study aims to evaluate differences in medical English learning and the impact of AR on learners. Ultimately, this research endeavors to contribute insights into the effectiveness of AR in addressing language acquisition challenges within the context of professional medical discourse while also shedding light on potential implementation obstacles.

Keywords: Augmented reality (AR), Medical English, self-directed Learning, college students