

THE ADVANCEMENT OF TEACHING SCIENCE LESSONS THROUGH AUGMENTED REALITY

by:

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Learning activities can be more efficient, straightforward, and enduring when learners actively engage in their senses to arrange their learning environment (Ekiz & Akyldz, 2010). Integrating technology into educational settings can enhance this engagement, allowing students to utilize their sensory experiences better. This approach can help simplify the learning and understanding abstract and challenging concepts.

Educational applications designed for tablets and mobile phones are emerging to foster creativity in students and help them visualize abstract concepts. Both children and adults are beginning to integrate these instructional methods into their daily lives and learning environments. Modern learning settings significantly benefit from augmented reality (AR) applications, which are particularly common in mobile platforms. Augmented reality is defined as the enhancement of real-world environments by overlaying sound, images, graphics, and location data generated by computers or mobile devices (Chou, 2016).

Learners believe that using technology will enhance their educational experience. Consequently, educators are exploring various technologies to incorporate into the classroom, aiming to promote active learning and improve student comprehension, especially in science. The subsequent sections address the challenges faced in teaching and learning science, along with the potential solutions that technology, such as augmented reality (AR), can provide.

The study of science is a complex process that involves several key steps: identifying a problem, researching the subject, formulating hypotheses, planning data collection methods, testing the hypotheses, gathering data, and drawing conclusions (Meerah, 1998). Engaging in these procedures helps learners to carefully analyze each step to achieve the best possible outcomes. However, fewer students are interested in pursuing studies in the science stream due to the widespread belief that science subjects are difficult.

Future research could explore the effects of augmented reality applications on teaching science lessons. While integrating advanced augmented reality features into the teaching process might be challenging, especially for abstract subjects, developing various augmented reality applications could enhance students' motivation to learn and accomplish the tasks in science lessons.

References:

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