Integrating Augmented Reality into Blended Learning for Elementary Science Course

ABSTRACT

Because of the advanced technology and popularity of mobile devices, Computer assisted instruction (CAI) has become an important role in learning activities and provide effective and efficient learning tools. With the development of digital learning, blended learning integrating a variety of multimedia technology and different learning method has become a hot topic in educational research. And studies have shown that the potential of CAI to benefit blended learning environments and increase the flexibility and interaction of learning activities. In recent years, augmented reality (AR) technology is new CAI tool that bring a new experience to learning. Therefore, this study proposed an augmented reality-based blended learning (ARBL) approach to evaluate the learning usability of elementary students. There were 25 participants to learn with ARBL, and a questionnaire was given to them to understand their feeling about the ARBL learning. The results of the experiment showed that students could enjoy the learning activities and they were interested in the learning course. And the ARBL learning approach provides a helpful CAI tool in the blended learning to assist teachers/students in exploring learning knowledge.