ABSTRACT

Instructional and training approaches have evolved to become more inclusive of active learning activities that include diverse types of technologies such as augmented reality (AR). Although AR is not a novel concept, it has only recently gained more recognition as being an effective tool to use in formal learning contexts. Researchers who have focused on the use of AR in educational and organizational settings have found that it helps to enhance learners’ levels of motivation and their attainment of content knowledge and critical thinking and problem-solving skills. AR tools are also considered to be beneficial since they provide users the opportunity to experience real-world events that they may not be able to experience due to cost constraints (e.g., travel) and lack of prior training (e.g., mechanical equipment).
INTRODUCTION

The way in which we teach, train, and acquire information has changed dramatically over the last several decades. Classroom settings now commonly contain technologically enhanced activities in which learners and employees are actively engaged via their laptops, computers, and/or mobile devices. Through the advancement of technology, educators and employers are now able to integrate a wider range of resources to supplement and enhance students’ and employees’ learning gains and levels of motivation and engagement. In fact, Martín-Gutiérrez and Contero (2011) suggested that augmented reality (AR) has been found to improve not only the learning process but may also result in easing the teacher’s workload. Additionally, the inclusion of AR could help to enhance learners’ levels of enthusiasm toward learning (Abdoli-Sejzi, 2015). Moreover, Abdoli-Seizi (2015) proclaimed that “AR is currently revolutionizing how we educate and learn” and that the creation of these types of learning experiences may be perceived by learners to be more interesting and satisfying (p. 3). These pedagogical changes may help to meet the unique learning preferences of digital learners who want and may even expect more technologically enhanced learning and training experiences. Indeed, Abdoli-Sejzi (2015) proclaimed that AR is a tool that can have a dramatic impact on contexts that include educational and training experiences.

BACKGROUND

What Is AR?

Researchers have discovered positive learning impacts for individuals who receive contextual and experiential learning experiences constructed in real-world environments with the inclusion of mobile and sensing technologies (Chu, Hwang, Tsai, & Tseng, 2010; Hung, Hwang, Lin, Wu, & Su, 2013). One way to create these types of enhanced learning experiences is through the inclusion of AR into classroom and corporate settings. AR is sometimes referred to as mixed-reality or blended reality (Zhu, Hadadgar, Masiello, & Zary, 2014) and is not a relatively new form of technology. In fact, Roesner, Kohno, and Molnar (2013) indicated that the field AR has been of interest to researchers since the 1960s. Nonetheless, AR has only recently become more popular in academic, organization, and in every day settings. Interestingly, many individuals may have even viewed AR without realizing it. Common examples of AR found on televisions include weather reports and televised sports. However, with the popularity of games such as Pokémon Go, AR has gained more popularity resulting in professionals pondering how they can
Case Study: Preparing Students for Active Engagement in Online and Blended Learning Environments
www.igi-global.com/chapter/case-study/186243?camid=4v1a

Creating Collaboration in Global Online Learning: Case Studies
www.igi-global.com/chapter/creating-collaboration-in-global-online-learning/111826?camid=4v1a