

Constructing Seamless Learning through Game-Based Learning Experiences

ABSTRACT

The goal of this paper is to explore how game-based experiences can be leveraged through mobile technology to activate learner engagement and achieve a seamless connection between formal and informal learning. The paper presents a game authoring tool that enables teachers to create mobile gamified lesson paths, drawing on the concept of atomic learning. Preliminary evaluation revealed three main findings. First, mobile games constitute a key driver in seamlessly blending informal, unguided learning that is driven by natural human curiosity with learning experiences, which are driven by defined, formal learning objectives. Second, ensuring learning units are suitable for direct use, and reuse, within game-based tools, requires content with high granularity. Third, the success of gamified learning depends on visual and audio impact, along with an appropriate blend of challenges, rewards, learning content, and assessment units that form the narrative backbone of the learner experience. Drawing on these nascent findings we identify key challenges and provide suggestions for future research and development.

Keywords: Mobile Learning, Seamless Learning, Games-Based Learning, Atomic Learning, Gamified Lesson Paths, Game Authoring Tool, Learner Engagement