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8. LEARNING BY CREATING EDUCATIONAL EXERGAMES

Creative Pedagogy That Gets Students Moving

ABSTRACT

With the rapid social, economic, and technological changes currently taking place in our society, collaboration skills and creativity are nowadays seen as basic survival and success factors. Technology-driven changes are also generating new challenges in the knowledge society. For example, the widening gap between daily information-centered activities carried out inside and outside school is undermining students’ engagement in school studies. What’s more, they are leading increasingly sedentary lifestyles and consequently obesity is becoming an increasing problem in many countries. So there is a clear call for educators to introduce innovative learning solutions and practices that engage students, support the development of 21st century skills, and increase the level of physical activity performed in schools.

In this paper we propose a new pedagogical approach, learning by creating educational exergames, an approach that entails user-generated content and gets children moving during school hours. We report the results of a pilot study in which students created educational exergames for their peers. The aim was to explore what happens when the learning-by-creating-educational-exergames approach is introduced in primary school and how students experience the creation of educational exergames. The results clearly indicate that this innovative approach can be successfully implemented in classroom teaching, it can make the school day more physically active, and help to engage and motivate students.

Keywords: creative pedagogy, exergames, learning

INTRODUCTION

Over the past decade, digital gameplay has become a very popular activity with a variety of audiences. Although academic debate continues on the effectiveness of game-based learning, researchers have increasingly argued that the meaning-making practices that occur when people engage with digital games define a form of literacy that is potentially better suited to address the needs of 21st Century learners (Gee, 2003; Squire, 2008; Devlin, 2011). However, recent research has
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