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Cultural and Philosophical Understanding of Game-based Learning in STEM Subjects

Julio Garay

Department of Chemistry, Earth Sciences and Environmental Sciences Bronx Community College, City University of New York, New York, NY, USA

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ABSTRACT Several reasons have been linked to the high percentage of failure when it comes to Sciences Technology, Engineering and Mathematics (STEM) subjects for college freshmen. The Higher Learning Commission during its annual conference in 2013 did find out that the leading factor, motivation, seems to play a significant role to inspire students to get involved in the course work. Much research, both in academic journals and mainstream magazines, has been published on how traditional methods of lecturing are neither engaging nor robust enough for STEM learners. In this paper, the author explores the Game-Based Learning method (GBL) as a promising platform to assistance students in their transition from high school to college level STEM courses. Additionally it also looks into the fundamental reasons why biologically, culturally and philosophically, playing has become an essential tool in engaging the real world without having to assume the risk of unwanted consequences.