

Manual for the use of Videogames and Apps in education

Videogames for teachers: From research to action

Chapter 13: Assessment of videogames and educational Apps based learning in tertiary education

Abstract:

Videogames in higher education are not yet explored and leveraged to the extent that they are used in primary and secondary education. One of the reasons is high costs of custom educational training development, including time and budget, the other is related to the complex competencies of a graduate that are difficult to define and assess.

This chapter focuses on how educational and leisure videogames could be leveraged to develop the graduate capabilities and be as well used as assessment tools for student performance and abilities. Students in higher education setting should develop cognitive attributes such as problem solving, critical analysis, communication skill to the extent where they are competent and flexible operating in the current and future context that is not yet defined.

Videogames similarly to higher education context contain complex and situational scenarios that require players to develop multiple interconnected abilities to strategize and adapt to ever-changing difficulty of the story. In this sense videogames become a media that could be used as a learning environment able to simulate high complexity and intensity situations necessary to develop and apply broad capabilities expected from the graduate. Moreover the digital environment allows teachers to observe learner behaviour through the learning process, track decisions and provide quality feedback in game as well as additional coaching along the way to foster the improvement.

This article provides analysis of videogames application for higher education competencies development, focusing on the assessment strategies and tools that could be used to better define and observe graduate capabilities. It will also introduce guidelines for incorporating videogames into curriculum, simplifying complex nature of assessment of higher education competencies and reducing educator subjectivity in evaluation process.

Keywords: evaluation methods, formative evaluation, higher education, educational innovation, teaching methods

