

Mission accomplished! Video games and education together at last

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Nowadays, most teenagers and, more and more frequently, younger children are massively surrounded by digital media in websites, mobile applications, social media, video games, etc. They have become part of their daily lives turning them into “Digital Natives” as Marc Prensky, an American writer on education, coined them in 2001¹. These generations are used to have everything at hand, in a quick move by double-clicking on a screen, making them different from pre-digital children, a fact that also affects the way they process information and, thus, the way they learn.

This new learning process creates a challenge for pre-digital teachers in terms of how to manage this new situation and how to fulfil Digital Natives’ needs. This idea drives us to the term Digital Game-Based Learning (DGBL), “a learning approach that incorporates the use of educational computer games or software programs to deliver [and practice] content and even to assess understanding [in a classroom]” (Martínez, 2009). Therefore, teachers attempt to find ways to take advantage of this situation and adapt their teaching methodologies towards a more digitalized teaching-learning atmosphere. It is important to consider that DGBL is not an approach created out of the blue, it is linked to several theories of learning such as Gardener’s Theory of Multiple Intelligences or Skinner’s Operant Conditioning, among others. Moreover, following Tang et al. (2009), DGBL’ methodology integrates three learning approaches: active, experiential and situated learning.

- **Active learning:** Focuses on the importance of using games to engage learners in participation and develop problem-solving skills in non-threatening virtual environments.
- **Experiential learning:** Supports the idea that students’ learn by performing different actions that shape their learning experience (i.e. learn by doing).
- **Situated learning:** This theory states that students need to be placed in a physical environment where collaboration and social interaction takes place. In the case of DGBL, this situation is translated into the use of virtual platforms where students collaborate with their classmates via real or online communication.

¹ More information in <http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives.%20Digital%20Immigrants%20-%20Part1.pdf>

Taking into account this substantial base, DGBL is an approach that can be perfectly adopted in nowadays teaching curricula as a supplement or an integrated approach to the already existing traditional teaching methodologies (Tang et al., 2009).

Now that we have some insight into the theory of Digital Game-Based Learning, let's see this approach into practice!



Quest to Learn: A ground-breaking school in NYC

Katie Salen, an executive director of non-profit design studio Institute of Play, is an example of one of the innovative *players* that get into the challenging journey of DGBL. She is the co-founder of a ground-breaking school in New York City called Quest to Learn which has integrated technology in their classrooms (Edutopia, 2013).

This public school opened in autumn 2009 and is addressed to secondary education students who live, as was mentioned before, in the world of technology. This institution believes in the fact that students have different learning styles, thus, they attempt to include different techniques in their curriculum to fulfil students' expectations. Therefore, they came up with a way to approach these Digital Natives by working with games as learning systems. Their ideology consists of making students see learning as a challenge they have to go through by overcoming different levels of expertise until they can obtain a goal, until they can say: "Mission accomplished!" Through this technique students learn by doing and they engage in a process in which their individual and collaborative skills allow them to become not only good learners but also problem-solvers.

Minecraft: Education Edition

Do you think that it is possible to use the popular game Minecraft as a classroom device to teach content to your students? Microsoft has made it possible thanks to a customized version of this game: Minecraft Education Edition which includes the same rules as the traditional version but it has been adapted to make it easier for teachers (Kastrenakes, 2016).

But you may think... What benefits can be taken from the use of this game in the classroom?

According to different teachers and experts in the technological field (Chris Aviles, Diane Main and Michael Dezuanni among others), this video game fosters the development of students' engagement in continuous problem-solving tasks and the possibility to align teachers' expertise

in their field of study to students' experience with videogames and even their expert knowledge of Minecraft itself (Mojang, 2017)².

After some examples of how video games can be used in a classroom setting, why not giving Game-Based Learning a chance?

² For more information visit <https://education.minecraft.net/how-it-works/why-minecraft/>

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