

## Manual for the use of Videogames and Apps in education

# Videogames for teachers: From research to action

### Chapter 8 - Main achievements of mobile learning through the use of educational app: exemplary case of Apps designed for education

#### Abstract:

The evolution of digital publications for education has led us in 30 years from CD ROMs of the 90's, to Apps for smartphones and tablets, up to the current solutions for devices of Augmented Reality and Virtual.

From the point of view of content, there is a certain continuity between the first educational multimedia works, such as the Dorling Kindersly series or the encyclopaedias on CD ROM, and the current educational mobile Apps. Compared to paper texts, CD ROM, App and VR/AR solutions add audio and video content, hypertext navigation, three-dimensional simulations, forms of gamification.

The mobile Apps, developed in the post-PC era, stand out for their portability, ubiquity, touch interface, sharing, etc. While educational works for PCs needed dedicated classrooms, with tablets and smartphones Apps can be used at any time and in any space of the school.

This pervasiveness of mobile devices, which in many cases causes distraction from the lesson, has even led to a ban on the use of smartphones in the classroom. In this sense, it is essential to properly manage mobile devices, limiting their use to what is necessary.

The best mobile educational apps are designed for intense learning experiences, highly interactive, and that use the sensors of mobile devices. touch, accelerometer, compass, GPS, image recognition and speech. The educational use of Apps on mobile devices must fully exploit the interactive and multimedia potential. Therefore, applications richer in interactive multimedia contents will be preferred.

Another typical element of applications for mobile devices, portability, makes it possible for students to use it on devices even outside the school context, at home, and in sharing.

The ability to share content can be useful for the development of collaborative projects involving more students, with the constant virtual presence of the teacher.

