

Section 3

Chapter 13 - Assessment in Videogames and Educational Apps Based Learning In Tertiary Education

Case Scenario 1

Title: **Entertainment game integration for project based learning**

Description:

In higher education it is required from student to be able to apply knowledge in a broader context, integrate different disciplines and approaches to show their competence. Project work is a good method to evaluate students ability to plan, research and observe situations or problems and get a grasp about how they approach the complex problems and solve them. However, the learning through this process is mostly observed through the project report and final presentation, giving little information about the trial process that led to the final product.

For the need to see students learning process while working on the project in addition to end result computer games is a very appealing solution. Usual entertainment games provide a wide and complex game worlds that allow students experimentation and various strategies to be applied. Such games as Civilisation, Portal 2 or SimCity can easily be applied in history, meth, physics, logic and societal studies. For example Civilisation could be used as an environment to make the project in focusing on different civilisation development approaches in order to recreate certain historic events or explore the new approach to specific situations. Then students are forming a plan and executing it within the game. Game tracks all the player actions and keeps the scores available for any given point in type to check the progress. Students making choices can experience the consequences and document then in the project report, however, the game



creates immersive feeling as actually making history. Also the game is constantly challenging players creating the complex learning environment.

For the success of implementing entertainment games into learning teacher curiosity and creativity is important. The game itself will not develop students, however, the structured play would. Teacher role is to define the learning activities, and set the targets for students so the engagement with the game would be educational and reflective. However, this requires teachers to play the game and understand it in order to develop tasks that turn the game into a media where learning activities happen. Teacher guides and lesson examples are available in some of the educational versions of the entertainment games, also online teachers community is full of good practices.

Commercial game companies recognise their games educational side, and the most recognised games now provide the education version or the service package that allows schools to purchase game with multiple licences for reduced prices. Some games, like SimCity provide the free game version for education purposes. It is worth consulting with the distributor about your unique educational needs.