The Genesis 3d Medieval French Village Project

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Think about the things that seem to engage young adults' interest today. What environments interest them? Social interactions are very important, obviously, and popular culture provides many opportunities for young adults to interact. There are also certain mediums that these young adults seem drawn to, for example video games. One of the time-tested ways that instructors have used to keep and maintain their students' interest has been to incorporate elements of popular culture into their teaching.

Professor Linda Smeins approached the CIIA in Fall 2000 with some ideas to enhance her art history course. She had recently traveled to France, and had been taken with the fact that if she could have just "transported" some of her medieval art and architecture students to that world, she was sure that they would find the subject matter they were studying both more interesting and more relevant to their lives. While she made extensive use of slides taken during her travels, she felt that her students lacked the opportunity to really explore and imagine themselves as actually being there.

The CIIA approached the project initially by planning to create some Quicktime panoramas that Dr. Smeins's students could look at. In doing the research, however, we realized that we could use a 3D game engine to create a virtual medieval world that Professor Smeins's students could actually explore. The students could in effect be "transported through time" to a medieval village, just as Professor Smeins had requested. They could walk in the spaces, view the perspectives, and get an idea of what it might have been like. She kindly supplied research materials on how medieval French villages looked, right down to the detail on the cathedrals, how the towns were laid out, and how the rest of the buildings and people looked (see Figure 1).

Figure 1. Sources of Information about Medieval French Villages

The Center for Instructional Innovation and Assessment employs several talented students who were interested in 3D graphic art and programming. We formed a team to explore the possibility of using a 3D game engine to create a medieval world that could be explored. We also thought it would be useful to provide a transition to the medieval world, so we created a short movie that would serve as a way for students to orient themselves to this new world. It involved a hypothetical student being "sucked in" to a medieval world by a time-traveling monk. We shot the short introductory movie on location in our own library's reading room. Figure 2 is a screen capture from the Medieval World that was created with the 3D game engine. A more complete view can be seen by viewing Clip 5 on the showcase videos page.

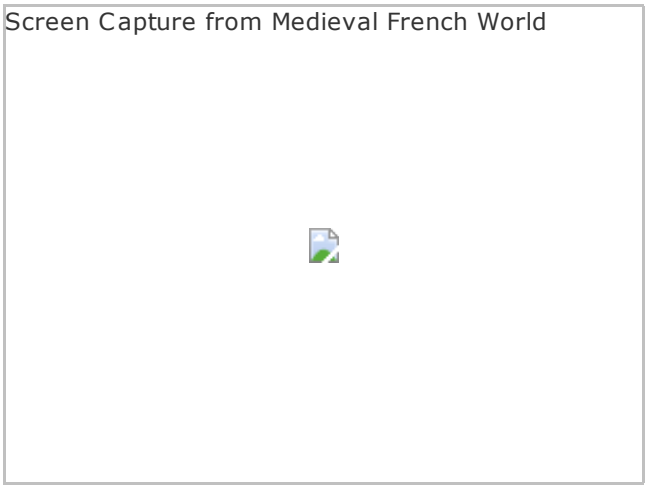

Figure 2. Screen Capture from Medieval French World

There is research evidence that immersive environments such as the 3D world created for Professor Smeins' course can strengthen connections between students and their course materials by making the materials more relevant to learners' experiences, by providing them with opportunities for interaction and exploration, and by using multiple channels or modalities to reinforce and deepen learning (Casto, 2001).

Resources

Genesis 3D Game Engine

This game engine was used to create the 3D medieval French Village. More information can be obtained at: http://www.genesis3d.com. This is an open source project, with a large active developers' community sharing code, tips, tricks, and procedures to create 3D games and worlds.

3D Studio Max and its associated program, Character Studio, are not free programs, but are very useful if you wish to create 3D characters and objects to add to your 3D world. More information can be obtained from Discreet's website at: http://www2.discreet.com/.

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