

Section 3

Chapter 14 - From Videogames to Work: Interactive Languages and Three-Dimensional Environments as Reference Models in Tomorrow's Professions.

Exemplary case 4

Title: An authoring system to create environments and 3D objects: SketchUP

Description:

The ability to create three-dimensional objects and environments, which are fundamental components of video games, will be, as we have seen, a valuable skill in many of tomorrow's occupations. It is therefore important to introduce into the school curriculum a reasonably simple professional tool to accompany students in this scenario. *SketchUp* is a free software, available for both Windows and Apple, used professionally in architectural design, design, civil engineering and even in the development of video games.

This application features a fast learning curve and is equipped with particularly flexible modelling tools, in particular the extrusion of 2D drawings using the inference technique. The modeling is organized into modules that can be modified simultaneously, the *rendering* is simplified, in comic-book style. It is also possible to develop simple animations.

One of the most relevant features of SketchUp is the availability of a large archive of ready-to-use 3D models, developed by users from all over the world. Also interesting is the geo-positioning functionality of the models, which allows them to be placed in *Google Earth* for urban simulations.

Light can also take on geographical characteristics and corresponds to natural light at a given date, time of day or geographical location.



SketchUP is a fundamental tool to break down the barrier to 3D modeling; it can also be used to create objects and environments that can then be imported into *software* for the creation of interactive applications or video games, such as *Unity*.

