The use of virtual reality for architectural design study

Isabela Gonçalves Magalhães¹; Júlia Alves dos Santos¹; Gisa Márcia Dutra Valente¹; Laura Cremoneze Rangel da Silva¹; Pedro Vitor de Freitas Muzy Lopes¹; Janine Fonseca Matos Xavier²; Pedro Miguel Gomes Januário¹; Luís Gustavo de Souza Xavier²³

(1) Volunteer students PROVIC/ISECENSA - Architecture and Urbanism Course, (2) Laboratory of Architectural Studies – LAEA- Institutos Superiores de Ensino do CENSA- ISECENSA - Rua Salvador Correa, 139, Centro, Campos dos Goytacazes, RJ, (3) CIAUD Research Centre, University of Lisbon (ULISBOA), Lisboa – Portugal

With the advancement of digital modeling software, computers with greater processing capacity and the evolution of specific rendering software, contribute to the increased use of images that simulate a real environment, being a practice increasingly inserted in the professional exercise of Architecture. This practice is already observed in the graduations where students seek to learn on their own the use of programs and plug-ins for rendering. This work aims to elaborate a didactic material aimed at teaching architectural design with the use of more usual software for model rendering and application of low-cost immersive virtual reality simulation tools for analysis of project development studies and not only as a final presentation product. The method used will be a research on the main existing renderers compatible with academic reality, choice of the most viable for students, elaborate guided exercises for the use of renderers with observation of products depending on the time spent. As a result it is intended to elaborate a didactic material with the main advantages and disadvantages of the analyzed software, and a practical exercise for application in the disciplines of architectural design.

Keywords: Architectural design teaching. Virtual reality. Rendering.

Supported by: ISECENSA