Remote Pedagogical Framework for Design Studio

Rationale

In the context of international VDS, the diversities of cultural and individual backgrounds are values that need to be promoted for good design solutions. For that purpose, this poster presents a Remote Pedagogical Framework for Virtual Architecture Design Studio.

Objectives

The objectives of the framework are: 1) To have one topic, Virtual Architecture (VA), for two teachings « Forme, Information, Novation et Conception » (FINC) in Toulouse (France), and « l’Atelier Virtuel » (AV) in Québec (Canada); 2) To establish a Multi-Cultural, Collaborative and Synchronous context; and 3) To use the original pedagogical objective differences as a source of enrichment.

Framework

Two combined aspects contribute to make that pedagogical experience an original one: its virtual architecture design topic, and its 3D real time open source remote setting. That framework is also an opportunity to introduce the various meanings of “virtuality” to students. Furthermore, they have to tackle their propositions only through synchronous and asynchronous remote collaborative design. Without sound and video, the resources deployment allows for real-time design collaboration between student pairs. Finally, support for 3D real-time communication is provided using available open-source technologies for both Mac and PC platforms.

Results

The proposed project, design of a virtual studio, has to be used by students as a place for exchanges and support for architectural design processes. A virtual space allowing and supporting the communication between the two groups of students. Three screenshots of as many projects are presented below. More information can be found at the following url’s: <http://www.toulouse.archi.fr/ensweb/pic/finc_av/>; and <http://www.limableu1.arc.ulaval.ca/atelier_virtuel/>.

Conclusions

We think, we have developed an operational way that gives "integrated class" principles. Whiteboard for jointly classes, would be relevant, as well as, an integrate real-time audio-video communication system (e.g. Access Grid). Fluidity of communication at time of interactive walkthrough into VRML models needs to be improved. However, with rustic but reasonable modes of communication, the whole result was satisfactory.

Acknowledgments

The pedagogical work reported was made possible in part by founding and support from both School of Toulouse and Laval University, Québec.