

"WEB Technologies for Environmental Distance Learning in CERES-GKN"

by Dr.Eng. A.D'Ambrogio and Prof.G.Iazeolla
Laboratory for Computer Science
and CERTIA Research Center
University of Roma TorVergata
Roma, Italy

Abstract

Distance learning is a widely recognized technique to train more people on more subjects, in a more cost effective way. Successful distance learning requires the adoption of several innovative technologies, to implement the virtual classroom concept, or a classroom overcoming the space and time limitations of traditional classrooms. Students can learn by joining the classroom from their place at their preferred time.

One of the modalities for distance learning is learning by simulation to perform sequences of experimental scenarios, to predict situations which could have impact on environmental pollution and safety, and result in large financial and social losses.

In the paper a technology for simulation-based distance learning is proposed, based on the use of advanced Web technologies. Example applications are introduced, in the field of environmental decision making, and environmental pollution from power plants and air traffic.