

Simulators over the Network

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Index Terms—CD-ROM, labware, learning by doing, simulation, WWW.

I. SUMMARY

In this paper we present SimulNet, our contribution to the improvement of high-quality learning at home using new technologies. SimulNet provides students with a teleteaching environment where the “learning-by-doing” paradigm is possible.

Unlike other distance teaching systems whose aim is to achieve a virtual classroom, SimulNet provides a virtual laboratory to put theoretical knowledge into practice.

Because SimulNet is a 100% pure Java system, our labware can be run on any computer and operating system. Our approach is based on the simulation of the actual laboratory tools which are delivered through the Internet (Java applets) or by CD-ROM technology (Java applications).

Although SimulNet can be used in a remote access way, Java allows us to provide always the highest level of interactivity, which is an essential feature in any distance education system.

In addition, SimulNet also provides a set of communication and tutoring tools for learners and instructors, providing a full cooperative learning atmosphere.

We believe distance education should not mean to study alone and, therefore, we made an extra effort to provide an environment where students and teachers feel as if they were in a virtual lecture room.

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CD-ROM folder 09.

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