



Supporting Learning through Intelligent and
Socially Informed Technology

<http://hcs.science.uva.nl/AIED2005/>

Tutorial at AIED 2005 – T4

Building Intelligent Learning Environments: Bridging Research and Practice

Abstract

This tutorial will bring together theory and practice about technology and learning science and take the next step toward developing intelligent learning environments. We will discuss dozens of example tutors and present a wealth of tools and methodologies, many taken from mathematics and science education, to help participants design and build their own intelligent learning environments. Discussions will focus on linking theory in learning systems, artificial intelligence, cognitive science and education with practice in writing specifications for an intelligent tutor. Systems will be designed based on advances in technology and knowledge of how people learn.

Participants are encouraged to select an academic domain in which they want to build an intelligent learning environment and the groups will break into teams several times to solve ill-structured design problems. The tutorial will provide a suite of tools and a toolkit for general work productivity and will emphasize a team-oriented, project based approach. We will share tutor techniques and identify some invariant principles behind successful approaches, while formalizing design knowledge within a class of exemplary environments in reusable form.

Presenter

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