

Designing for Learners, Instructors, and Authors

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Problem-based learning is a pedagogical strategy that centers learning activities around the investigation and development of solutions to complex and ill-structured authentic problems. Computer-based interactive learning environments have been used to provide authentic and supportive settings for problem-based learning. INDIE is a software tool designed for domain experts to easily build and deploy web-based interactive learning environments where students can run simulated experiments, analyze test results, form rationales, and construct arguments to support or refute possible hypotheses. This talk will describe INDIE and Corrosion Investigator, a learning environment built by INDIE, to illustrate framework-based authoring and learning environment design. The audience see how design for learning raises different issues than design for work, and some approaches to usability challenges in learner-computer interaction, instructor-computer interaction, and author-computer interaction.

Biography:

Lin Qiu is an Assistant Professor in the Department of Computer Science at SUNY-Oswego. He will receive his Ph.D. in Computer Science with a graduate specialization in Cognitive Science from Northwestern University in June 2005. His research interests lie in the area of human-computer interaction and artificial intelligence, with focus on the design and authoring of intelligent systems for education. He has broad interests in learning technologies, cognitive science, and education.