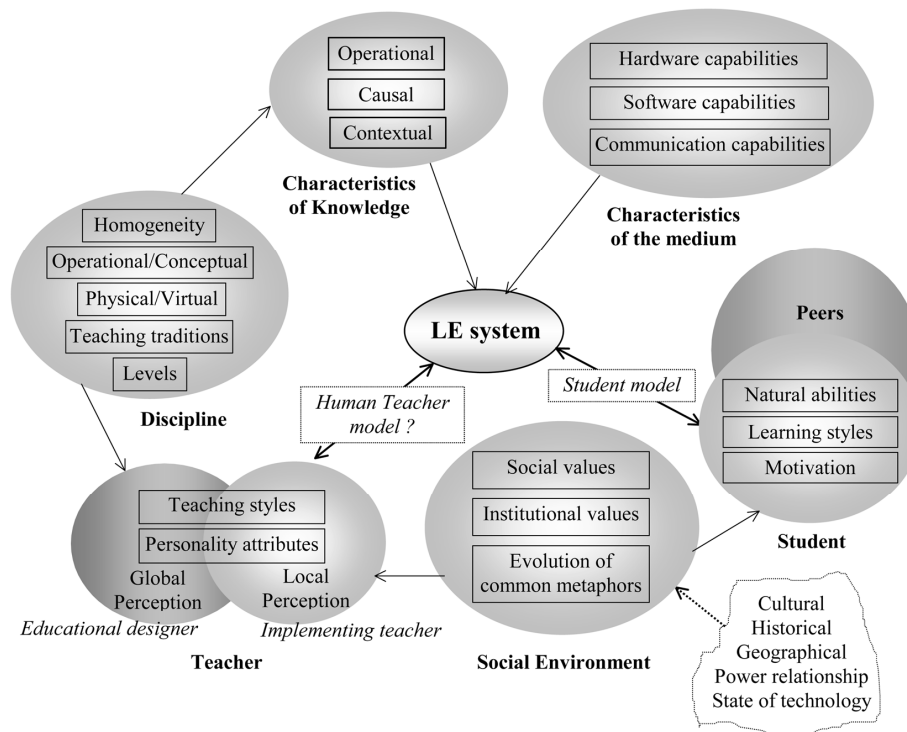


THE INTELLIGENT TUTORING SYSTEM (ITS) VERTICALLY-INTEGRATED PROJECTS TEAM

TEAM TITLE: Intelligent Tutoring System VIP Team

GOALS: Develop interactive systems that enhance learning by supporting "digital dialogs" between students and all resources available for a course. The project will use and develop concept mining tools to generate metadata across a diverse set of materials, such as course notes, textbooks, archive of homework questions, databases of tests and solutions, laboratories, web resources, etc. The system will adapt to individual skill levels and learning styles to tailor the learning experience to student needs. New technologies, including wireless networks and 3G smart-phones will be used to allow anytime, anywhere access to the system.



TECHNOLOGIES: Databases, Learning theory, Learning systems, Web interfaces and applications, Concept maps, Ontologies.

RESEARCH ISSUES: Organization of course content through a hierarchical representation of concept maps. Data mining of student interactions for adaptation. Structuring student learning by tutor-based interactions via "digital dialogs".

TEAM ADVISORS: James McClellan (ECE)

PROJECT PARTNERS: Students Enrolled in DSP Courses in ECE

DESIRED DISCIPLINES AND PREPARATION:

EE – Background/interest in signal/image/video processing, learning theory, adaptive systems
Programming/databases experience would be helpful but is not required.

CmpE, CS – Background/interest in databases, web interface and applications;
Databases experience would be helpful but is not required.