Modeling Information Systems: A Novel Approach for Educating Health Informaticians
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Abstract
Those who educate health informaticians are charged with keeping courses innovative in a quickly changing specialty. This need prompted the development of a course which simulates information systems design. Students learn as they perform the role of health informatics consultant. The simulation experience becomes more profound with the inter-professional student population, introduction of object-oriented techniques, and skillful incorporation of Second Life, the venue for simulation of real-life tasks necessary to design an information system.

Problem Description
Students who graduate with specialization in informatics are future leaders in health informatics. This course acts as a guide which simulates real-world work for these future leaders so they have the abilities necessary to participate in the design of an information system. It is also essential for informaticians to learn and develop the basic skills for participation in HL7, IHE, and open EHR activities.

The task of systems analysts is to study a system and to specify its requirements by building a working model of it. The analysis module focus is tools, skills and tasks of systems analysis for an information system used in healthcare. The skills to be learned are an ability to elicit requirements, requirements analysis, and modeling of the ‘as-is’ state and exploring the problem space.

Overview
In the nursing and inter-professional course, Abstraction and Modeling of Health Care Information, students play the role of consultants throughout the course as they move through the process of information system analysis and design. The course is set up as an information system design simulation utilizing the KUMC Isle Jayhawk Community Living Center in Second Life (SL), which is a virtual assisted living center.

The emphasis is on determination and analysis of information system requirements and system design that meet the identified healthcare information requirements. Object-oriented techniques are introduced, including unified modeling language and unified modeling methodology, to facilitate process analysis and design proposal development.

Conclusion
Keeping courses innovative by utilizing progressive informatics techniques is very important. It is also necessary to practice these techniques in a simulation of a real-world environment where it is safe to make mistakes and experiment with variations on what is being learned. The utilization of this course as a simulation of the information system design process gives opportunity for students to learn and apply their knowledge in a venue which has been set up to resemble the process current in business settings.