

MEDICAL-SURGICAL EDUCATION WITH VIDEO GAMES

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ABSTRACT:

Can we link Web, CD-ROM and DVD delivery of learning technologies with the motivational aspects of Games? The current generation of students of the healthcare professions includes an increasing number of 'gamers' who access web-based video games for entertainment. This workshop focuses on examples of 'serious games' that embrace learning with the 'fun' features of video games, without regard to how they are delivered. Issues of design, development, and interfaces/controllers will be discussed, with comparison examples. The presenters will review issues of motivation that are primal affinity factors for the success of video games, issues of scoring and performance metrics, and will link these to learning about delivery of quality care and safe professional performance. Multiple levels of gaming for learning will be discussed for applications in patient education regarding disease management, or those seeking pre-hospital familiarization prior to a scheduled visit, or for various members of the healthcare team, including for pre-hospital providers (first responders to crisis events).

OBJECTIVES

Raise awareness of the potential of gaming approaches and technologies in the development of educational content.

BENEFIT TO PARTICIPANTS ATTENDING SESSION:

You will gain a working knowledge of what stories or scenarios make a good educational video game, and see demonstrations of medical and surgical simulations that are subjects for use of gaming strategies and technologies.

PREREQUISITES

It is desirable that participants play at least one modern videogame on game stations or on the web, and to be able to discuss its desirable features at the workshop.

AUDIENCE:

This workshop will be of interest to developers and educators who have recognized that games can capture and hold a player's attention for many hours, and are seeking to add a similar engaging component to learning resources in their area of expertise. (No audience size limit.)

QUALIFICATIONS

Parvati Dev has worked for 15 years in the design, production, deployment and evaluation of educational multimedia, and has led a research group, SUMMIT, that is recognized as one of the leading and innovative learning technology groups in the world. Recently she has been investigating new technologies such as simulations including physical and virtual reality and 3D virtual worlds.

W. LeRoy Heinrichs is an academic gynecologist, and researcher at SUMMIT, who has focused on the innovative potential of simulators in changing medical and surgical education. For the last 15 years, he has led numerous research and development projects to create new simulator and to bring them into use in clinical training. Most recently he is the developer of the 3D Emergency Department multiplayer simulation, which has been evaluated in both Stanford and Sweden (Karolinska Institute), and has compared the learning outcomes with those from the manikin-based Human Patient Simulator.