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## Simulation as a Tool to Enhance Learning & Education

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# Simulation as a Tool to Enhance Learning & Education

The use of simulating activities for enhanced learning has improved over the years. Specifically, in the study of health science education; it has gone from injecting oranges to the use of life-like simulation tools, video game consoles and 3-D software. This poster illustrates several simulation tools currently available for use in the classroom. Medical simulation training can improve healthcare quality and patient safety across the healthcare education spectrum.

### **Harvey: The Cardiopulmonary Simulator**



A sophisticated trainer for teaching and practicing the use of an ophthalmoscope, examining the ocular fundus, and learning and identifying diseases and conditions within the eye. The pupil diameter can be altered and reproduces a realistic visual axis and view of eyegrounds.

#### Wii



Created for doctors in countries where, due to religious beliefs and customs, cadavers are not available for dissection, Cyber-Anatomy provides the learner with a realistic and immersive environment for virtual dissection and exploration of anatomy. Harvey is a life-sized mannequin created to help learners develop and improve their diagnostic skills in the field of cardiac care. Harvey gives the user the opportunity to study various cardiac conditions and practice bedside examination techniques under realistic conditions without the difficulty of finding an appropriate group of available cardiology patients

#### **Eye Examination Simulator**



A student plays *Trauma* Center, a medically oriented video game on the Nintendo Wii that simulates surgical procedures. This game allows the student to enhance their manual dexterity and hand-eye coordination skills that they'll need when operating on a patient.

#### **Cyber-Anatomy**



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