Strategies to Incorporate Virtual Simulation in Nurse Education

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Objectives

- Clarify the meaning of virtual simulation

- Identify multiple vendors of virtual simulation platforms.

- Describe various potential uses of virtual simulation in nurse education.

- Perform a trial of virtual simulation with the vSim ™ and CliniSpace™ platforms.

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Disclosures

- Foronda, C. & Bauman, E. (In Press). Strategies to incorporate virtual simulation in nurse education. *Clinical Simulation in Nursing.*

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Disclosures

- Dr. Foronda serves on the advisory board for CliniSpace™.

- Dr. Eric Bauman acknowledges that he has served as a paid consultant for Innovation in Learning, Inc., developers of CliniSpace™.

The IOM Report *The Future of Nursing: Leading Change, Advancing Health* provides direction for educators to use simulation and web-based learning.

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What is virtual simulation?
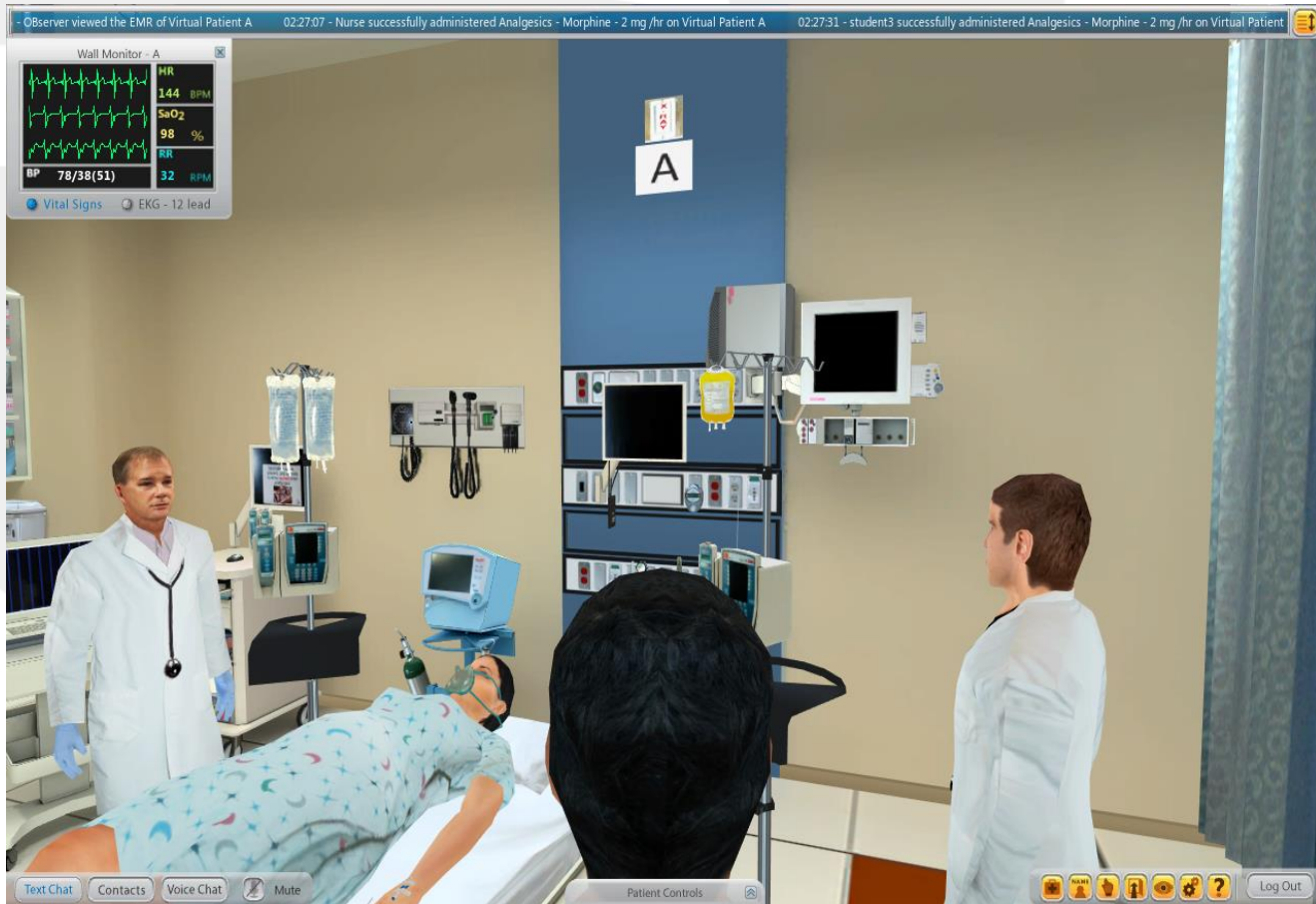
CliniSpace™/www.clinispace.com

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What is virtual simulation?

AKA:

- 3D Virtual Worlds
- Serious Gaming
- Massively Multiplayer Virtual Worlds
- Single User products as well

Products:

- ArchieMD™
- CliniSpace™
- Second Life™
- TINA™
- Virtual Heroes™
- vSim™

Background

- Simulation as a teaching strategy is supported by multiple educational theories.
  - Kolb's (1984) theory of experiential learning
  - Benner's (1984) theory of novice to expert
  - Schön's thinking-in-action/thinking-on-action (1983)

Ideas for Use of Virtual Simulation

- Enhance web-based instruction
- Hybrid simulation
- Augment Lecture
- Assignments
- High-Stakes Testing/Capstone

Ideas for Use of Virtual Simulation

- Clinical Practicum

- Clinical Makeup

- High Risk Situations

- Documentation

- Entrance Testing

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Ideas for Use of Virtual Simulation

- Train the Trainer

- Intra and Interdisciplinary

- Collaboration Nationally and Internationally

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Action Plan

- Plan the uses for Virtual Simulation

- Consider experiences not readily available in clinical practicum

- For example:
  - Disaster simulation
  - High-risk pediatrics
  - High stakes testing
  - Interprofessional simulation
  - Clinical makeup

Action Plan

- Costs range from $100/student to $10,000/year to $1,000,000 for purchase.

- Decide on product and method of payment

- Student expense?

- In the existing budget, existing grant, budgeted for future

- Grant funding?
  - SSH, INACSL, STTI, NLN,
  - Internal innovation and learning grants

Where to start?

- Choose student learning objectives that are difficult to achieve clinically

- Choose the course/s that encompass those objectives and pick the priority course for integration.

- Focus on 1-2 objectives for the simulation

- Devise an evaluation tool (rubric/test)

Implementation of virtual simulation planning tool

Course	Subject Matter	Topic	Objectives	Skill sets to be learned/practiced in the simulation	Evaluation Plan
Career Pathway NUR 350	Professional Communication	ISBAR	Recognize concerning patient data. Accurately perform ISBAR communication technique.	Assessment Communication	ISBAR Intercomm Instrument (rubric)

KEY POINT

"Virtual simulation can and should find a standard place in future nurse education similar to mannequin-based simulation."

(Foronda, Godsall & Trybulski, 2012).

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http://thepoint.lww.com/gateway

VSIM BY LAERDAL / WOLTERS KLUWER

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http://www.clinispace.net/Simcenter/Builds/CS2GD/Win_CS2_VSC_2014-03-19.zip

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Questions?

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