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.
Disclosures

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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.
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:
  o Disaster simulation
  o High-risk pediatrics
  o High stakes testing
  o Interprofessional simulation
  o 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

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

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**Career Pathway NUR 350**

**Professional Communication**

**ISBAR**

Recognize concerning patient data. Accurately perform ISBAR communication technique.

**Assessment Communication**

**ISBAR Intercomm Instrument (rubric)**

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KEY POINT

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

(Foronda, Godsall & Trybulski, 2012).
Jennifer Hoffman
Diagnosis: Acute asthma
Location: Emergency Room

Jennifer Hoffman is a 33-year-old female brought to Emergency Department by her neighbor.

She has a history of asthma since childhood with multiple emergency visits within the last year. She appears to be in respiratory distress, struggling to breathe. She is unable to speak other than simple one-word statements.

An infusion of normal saline has been started at a slow-open rate.

You have not yet completed this patient case.

Actions are grouped under tabbed sections, such as ‘Assessments’ and ‘Interventions,’ making it easy to find a specific action.

http://thepoint.lww.com/gateway

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References


References


Questions?

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