Gaming in Healthcare Training

Parvati Dev
Features of a ‘Serious’ Game

• Represents reality
• Your actions correspond to possible real actions
• Getting a good outcome (‘saving the patient’) is the main feature of the game
• Scores, competition, feedback, are additional features of the game
• Learning may be emergent from game play, or may be derived from feedback and mentor comments
Examples of Games
Mean student scores

Learning Efficacy

Source: June 2007 Elsevier Saunders journal article “Virtual Worlds and Team Training” by Parvati Dev, Patricia Youngblood, W. LeRoy Heinrichs, and Laura Kusumoto
Realistic situations for safe practice
THANK YOU

Parvati Dev
President, Innovation in Learning Inc., California, U.S.A.
Distinguished Visiting Scholar, Stanford University, California
parvati@clinispace.com
## Architecture of Game

<table>
<thead>
<tr>
<th>Session</th>
<th>Learning Management System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking</td>
<td>Feedback, performance metrics</td>
</tr>
<tr>
<td>Scenario</td>
<td>Diagnosis, management, communication</td>
</tr>
<tr>
<td>Virtual patient</td>
<td>Medical pathophysiology</td>
</tr>
<tr>
<td>Medical simulation</td>
<td>3D space, objects, characters, function</td>
</tr>
<tr>
<td>Middleware</td>
<td>Integrate game engine, database, voice, etc</td>
</tr>
</tbody>
</table>