Applied Learning in Higher Education

November 11, 2015
Considerations for Online Experiential Learning

- Course Design
- Technology
  - Technology selection
  - Training for all parties
  - Test technology
- Participation of students and community partners/clients
  - Communication plan

Course Design

- Design a “solid” course
- Clear communication plan(s)
- Rubrics
- Course goals/objectives
- Use course design rubric- peer review

Technology

• Consult with Instructional designers/technologists

• Seek training

• Test technology – both instructor and client/student

Community Partner Communication

• Expectations sent to all parties prior to course implementation (for e-service learning)

• Enroll community partner in your course

Service Learning Benefit Scale (SELEB)

• Measures student perceptions of experiential learning activities

• Importance-Performance Analysis (pre-post)
  • Practical skills
  • Interpersonal skills
  • Citizenship
  • Personal responsibility

<table>
<thead>
<tr>
<th>Practical Skills</th>
<th>Interpersonal Skills</th>
<th>Citizenship</th>
<th>Personal Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applying Knowledge to the “Real World”</td>
<td>Person growth</td>
<td>Understanding cultural and racial differences</td>
<td>Caring relationships</td>
</tr>
<tr>
<td>Problem Analysis and Critical Thinking</td>
<td>Ability to work well with others</td>
<td>Social responsibility and citizenship skills</td>
<td>Being trusted by others</td>
</tr>
<tr>
<td>Social Self-Confidence</td>
<td>Leadership Skills</td>
<td>Community involvement</td>
<td>Empathy and sensitivity to the plight of others</td>
</tr>
<tr>
<td>Conflict Resolution</td>
<td>Communication skills</td>
<td>Ability to make a difference in the community</td>
<td></td>
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<tr>
<td>Workplace skills</td>
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<tr>
<td>Skills in Learning from Experience</td>
<td></td>
<td></td>
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<tr>
<td>Organizational Skills</td>
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</tbody>
</table>
Importance-Performance Analysis (IPA)

• Typically seeks to measure customer satisfaction and quality of service.

• Guide changes needed in service industries

• Analyze the outcomes of the design of the experiential learning activity
IPA Matrix

- **Quadrant IV**: Low Importance/High Satisfaction
  - "Possible Overkill"

- **Quadrant I**: High Importance/High Satisfaction
  - "Keep Up the Good Work"

- **Quadrant III**: Low Importance/Low Satisfaction
  - "Low Priority"

- **Quadrant II**: High Importance/Low Satisfaction
  - "Concentrate Here"
Importance vs. Performance

Applying knowledge to real world
Undergraduate Example

Education Courses: Simulated Role of Teacher
Scaffolded Assignment Simulation

- Classroom Design
- Classroom Management
- Lesson Plan
- Unit Plan
Classroom Rules

1. **BE RESPECTFUL TO ALL INDIVIDUALS**
   - Treat others the way that you want to be treated
   - Be a helping classmate to others when they are in need
   - Be honest when you speak
   - Follow directions the first time given
   - Use kind and courteous words

2. **BE SAFE AT ALL TIMES**
   - Keep hands, feet, and objects to yourself
   - Ask permission to leave your seat
   - Care for all classroom materials
   - Always walk
   - Sit in a learning position

3. **BE RESPONSIBLE FOR YOUR LEARNING AND YOUR SUCCESS**
   - Complete all assignments
   - Stay focused during learning time
   - Take care of your materials
   - Do your personal best
   - Follow the SLANT process

   (Sit up. Lean forward. Actively participate. Nod your head to show understanding. Track your teacher and materials)

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**Incentives**
- Compliment
- Gold Slip
- Sticker
- Positive Note Home
- Daily Helper (next school day)
- Prize from Classroom Prize Box
- Lunch with Mrs. Lockett

**Consequences**
- Reminder and redirection
- Verbal Warning
- Time Out in classroom (Reflection Paper)
- Teacher/Student Conference
- Parent Contact
- Time Out in another classroom
- Administrative Assistance
Graduate Example

Simulation/Job Aid
Simulation and Job Aid Modeling Examples

Simulation Examples
- DNA Molecular Design
  - Pairing of nucleotides
- Interactive Grid Paper
  - Free-standing tri-colored options of grid paper
- PlaySpent
  - Poverty simulation with an outcome directed by participant’s answers

Job Aid Examples
- Origami
  - Create Lily out of paper
- Camtasia
  - Recording video using software
- Umoja
  - Company’s process for bank reconciliations
CAMERA APP

Create | Integrate | Engage

Camera App

The camera app is by far one of the best features of the iPad. It’s so easy to use and the possibilities of using the camera app are endless! Say goodbye to bulky digital cameras and hello to innumerable opportunities for learning with the iPad camera.

Integration Ideas

- Have students demonstrate their learning using pictures and videos.
- Assessment tool
- Produce and edit videos and photos
- Skype with other students around the world
- Produce movie trailers for a novel study
- Easily integrate with a lot of other apps

"App"tivity #1

- Open Camera App
- Focus camera on a particular object/person
- Play with the exposure by clicking on several different areas of your iPad screen noting how the light changes.
- Enable zoom feature by pinching two fingers together on the screen.
- Press HDR and take a picture by tapping the shutter button.
- Take multiple pictures of an object by holding down the shutter button.
- Change the camera options by swiping your finger up or down the video, photo, square and time-lapse options.
- Press camera in upper right hand corner to enable the front facing camera.

Created by Stacey Robinson
How to Insert a Nasogastric (NG) Tube

A. STUDENT, BSN RB CEN

Step 4 – Measure & Mark

- Measure distance to insert Tube:
  a) Place tube tip to nose tip,
  b) Next extend tube back to the tip of the ear,
  c) Then down to top of Xyphoid Process.
  d) Mark tube with tape to indicate correct length

Step 9 – Secure Tube

- a) Apply skin-prep across top of nose where tube will be attached
- b) Attach securement device across bridge of nose then around tube
Graduate Example

Simulating Role of Coach/Consultant
TNA: Coach/Consultant Role

• Develop training needs assessment

• Administer developed assessment to at least 5 individuals

• Collect and Synthesize data

• Identify most significant needs

• Outline training agenda
<table>
<thead>
<tr>
<th></th>
<th>Nursing (RN)</th>
<th>Respiratory Therapy (RT)</th>
<th>Radiography (RAD)</th>
<th>Emergency Medical Services (EMS)</th>
<th>Pharmacy Technology (PT)</th>
<th>Medical Assisting (MA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Instructors who completed this survey</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Average Length time teaching SIM</td>
<td>28 months</td>
<td>38 months</td>
<td>12 months</td>
<td>48 months</td>
<td>8 months</td>
<td>6 months</td>
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<tr>
<td>Receiving Formal Training as Healthcare Simulation Educator</td>
<td>2 = Yes 2 = No</td>
<td>2 = Yes 1 = No</td>
<td>1 = Yes 1 = No</td>
<td>2 = Yes 1 = No</td>
<td>1 = No</td>
<td>1 = No</td>
</tr>
<tr>
<td>Annual CEU’s related to SIM Education</td>
<td>6 hrs</td>
<td>0</td>
<td>0</td>
<td>2 hrs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of Times student use SIM</td>
<td>4 times week</td>
<td>2 times week</td>
<td>Twice month</td>
<td>5 days week</td>
<td>1 time week</td>
<td>Twice Semester</td>
</tr>
<tr>
<td>Number of hours per SIM session</td>
<td>8hrs</td>
<td>4hrs</td>
<td>6hrs</td>
<td>6hrs</td>
<td>2hrs</td>
<td>3hrs</td>
</tr>
</tbody>
</table>
Data Analysis and Identify Gaps in Knowledge:
Each question on the survey, justification for the question and individual results can be found following this comprehensive table. Below is a chart groups the data based on overall response, which makes it easier to review. I was able to determine the following needs.

FACULTY TRAINING NEEDS ANALYSIS

Interprofessional Communication
Leading Debriefing Sessions
Writing Clinical SIM scenarios
Teaching Clinical Skills in SIM
Setup and use of Simulator
Troubleshooting the Equipment
Integrating SIM into course

- Extremely Comfortable
- Very Comfortable
- Moderately Comfortable
- Slightly Uncomfortable
- Very Uncomfortable
<table>
<thead>
<tr>
<th>Time</th>
<th>Content Focus</th>
<th>Instructional Method/Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-15 minutes</td>
<td>Welcome and Overview</td>
<td>Presentation by facilitator</td>
</tr>
<tr>
<td>8:00-8:15 am</td>
<td>- Rationale and purpose of training</td>
<td></td>
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<tr>
<td></td>
<td>- Instructions for breakout sessions</td>
<td></td>
</tr>
<tr>
<td>30 minutes</td>
<td>SESSION 1: Designing and Writing a Simulation Scenario</td>
<td>Interactive presentation with audience input</td>
</tr>
<tr>
<td>8:15-8:45 am</td>
<td>- Review of relevant literature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Discuss various development templates and educational models</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Review steps necessary in planning an effective simulation</td>
<td></td>
</tr>
<tr>
<td>90 minutes</td>
<td>Breakout Session 1</td>
<td>Small group interaction Worksheets distributed</td>
</tr>
<tr>
<td>8:45-10:15 am</td>
<td>- Write Learning Objective(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Create Clinical Case Map that incorporates all disciplines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Identify Clinical Skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Create a supply list</td>
<td></td>
</tr>
<tr>
<td>15 minutes</td>
<td><strong>Break</strong></td>
<td></td>
</tr>
<tr>
<td>60 minutes</td>
<td>Team Sharing Session 1 – each group will present:</td>
<td>Large group interaction</td>
</tr>
<tr>
<td>10:30-11:30 am</td>
<td>- Learning Objective(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Case outline</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Opportunities and Strategies to use the exercise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Identify Pro’s &amp; Con’s</td>
<td></td>
</tr>
<tr>
<td>11:30-12:30 pm</td>
<td><strong>Lunch</strong></td>
<td></td>
</tr>
<tr>
<td>30 minutes</td>
<td>SESSION 2: Debriefing: Process, Utility and Feasibility</td>
<td>Interactive presentation with audience input</td>
</tr>
<tr>
<td>12:30-1 pm</td>
<td>- Review of relevant literature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Discuss variations of the educational method/teaching strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Benefits of incorporating new methods</td>
<td></td>
</tr>
<tr>
<td>90 minutes</td>
<td>Breakout Session 2 - (held in SIM Lab)</td>
<td>Small group interaction Worksheets distributed</td>
</tr>
<tr>
<td>1:2:30 pm</td>
<td>- Lab testing of scenario created</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Use model to practice facilitating debriefing</td>
<td></td>
</tr>
<tr>
<td>15 minutes</td>
<td><strong>Break</strong></td>
<td></td>
</tr>
<tr>
<td>60 minutes</td>
<td>Team Sharing Session 2 – each group will present:</td>
<td>Large group interaction</td>
</tr>
<tr>
<td>2:45-3:45 pm</td>
<td>- Identify most innovative method match to objective(s)</td>
<td></td>
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<tr>
<td></td>
<td>- List Pro’s/Con’s</td>
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<tr>
<td>15 minutes</td>
<td>Summary and Evaluation</td>
<td>Evaluation form distributed</td>
</tr>
<tr>
<td>3:45 – 4 pm</td>
<td>- Questions</td>
<td></td>
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<tr>
<td></td>
<td>- Complete session evaluation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Topics for future training</td>
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</tbody>
</table>