Cybergogy as a framework for teaching design students in virtual worlds
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Cybergogy as a framework for teaching design students in virtual worlds

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Project themes

• (Architectural) Design T&L
• Virtual environments (design & learning)
• Content and Language Integrated Learning
• Fragility of environments
Partners

Associated partners & subcontractors
Second Life islands
Cybergogy components

Simulation
Role play
Meshed
Assessment
Peregrination
Learning Activity
Learning Activity
Learning Activity
Learning Activity
Learning Activity

Cognitive
Dextrous
Social
Emotional

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Taxonomy of Learning Domains

Level of Implementation
- Level 6
- Level 5
- Level 4
- Level 3
- Level 2
- Level 1

Cognitive Domain
- Creating
- Evaluating
- Analysing
- Applying
- Understanding
- Remembering

Emotional Domain
- Influencing
- Empathising
- Engaging
- Self Regulating
- Attending
- Perceiving

Dextrous Domain
- Mastering
- Naturalising
- Articulating
- Developing Precision
- Manipulating
- Imitating

Social Domain
- Channelling
- Networking
- Affiliating
- Communicating
- Contextualising
- Personalising
Second Life classes

• 1 hour induction class (teachers)
• 10 hour building class (teachers)
• 4 hour building/presentation class (studio students, Slovenia)
• 2 hour class on lighting techniques, linked to lighting design course (Slovenia)

instructor, students, mediators, observers
<table>
<thead>
<tr>
<th>Time Allocated</th>
<th>Topic</th>
<th>SL Activity/Learning Archetype/Additional Resources</th>
<th>Learning Domains Addressed</th>
<th>Learners RL Activity</th>
<th>Assessment Archetype</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce 10m+15m</td>
<td></td>
<td>(details omitted)</td>
<td></td>
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<tr>
<td>Develop 10m</td>
<td>Building Techniques:</td>
<td>Simulation Archetype Language Mediators support students during the following tasks</td>
<td>Cognitive Lv1&amp;2</td>
<td>Attend to following 5 demonstrations</td>
<td>Formative Q&amp;A to check for remembering and understanding (Cognitive) and imitation (Dextrous)</td>
</tr>
<tr>
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<td>• Prim Linking</td>
<td>Leader demonstrates linking/unlinking prims. Learners imitate tutor.</td>
<td>Emotional Lv1 Social Lv3</td>
<td>Take notes for reference as required</td>
<td>Observation of practical output</td>
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<td>• Permissions</td>
<td>Leader demonstrates object permissions. Leader advises learners how setting permissions over objects can limit or permit users interaction. Learners (in pairs) imitate leader.</td>
<td>Dextrous Lv1 Cognitive Lv2 Cognitive Lv2</td>
<td>Formulate questions in note form for summative Q&amp;A</td>
<td>Based on the Emotional Domain, learners are questioned regarding their feelings of the activity and perception of their abilities/satisfaction. Group forum is encouraged for peer feedback</td>
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<td><strong>Textures</strong></td>
<td><strong>Building to Scale</strong></td>
<td><strong>Presentations in SL</strong></td>
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<td>Leader in-world presentation, demonstration. Learners imitate Leader.</td>
<td>Leader presentation: Avatar size, camera issues, Mouselook</td>
<td>Leader Presentation: 3D objects, slideshows, Uploading images, media on a prim, Chat, voice or text</td>
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</tbody>
</table>
Building class area

- Presentation & demo area
- Immersive lighting chamber
- Display of tips, tools & examples
- Practice area
Building class
Building practice
Immersive lighting chamber
Lighting Q&A
Issues

• Mixed student cohorts, many with inadequate SL experience, caused delays
• Weak use of emotional and social domains in learning outcomes
• No evident (English) language comprehension problems
• Lack of body language as feedback
• Difficult avatar identification in unstructured virtual space
Conclusions

- Which technologies work best
- ‘Belt and braces’ approach to teaching with technology
- Learning curve for SL and similar 3DiVWs higher than novices anticipate
- More time required for induction and building classes
- Use of 3DiVW environment best integrated into curriculum and supported
- Detailed, adaptable lesson plans mapping Learning Archetypes & Learning Domains to learning activities

Outcomes

- Packaged content for course delivery in Second Life and similar 3DiVWs
- ‘Learning Objects’ for Cybergogy and architectural lighting design
- Best practice guidelines for design students and practitioners in 3DiVWs