Making Virtual Learning Spaces A Reality
The Team

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SL Builder

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El Cerrito Village
Introduction by Dr. Brock Brown

El Cerrito, New Mexico
San Miguel County
Founded 1824
Population approx. 13
Elevation 5712 feet
From San Marcos
725 miles
12 hours and 32 minutes
Avoid common pitfalls
  Too much emphasis on visual aesthetics
  Instructionally sound, but not visually engaging

The outcome should…
  Be instructionally sound in design
  Be visually engaging, but not overwhelming
  Take advantage of existing multimedia resources
Review of Student Demographics

GEO 4190 blossoms!
Special topics course, taught in Fall 2011
Strong interest shown by GEO Ed and GIS majors
Field test limited to 4 students, with approval
Pre-Course Survey Results

Highlights
Tech savvy? (50/50)
Equivalent experience? (50/50)
Ability to master course objectives (100%)
Attitude toward hybrid approach (100%)
Feel like part of a learning community (100%)
History of Texas State in Second Life

2006
AUGUST
First sim purchased

2007
JANUARY
Bobcat Village virtual campus completed
Second sim purchased

2007-2009
Instructors use the sim for classes.

2009-2011
Shift towards building simulations
# Comparative Study of Virtual Environments for Teaching

## Criteria for selection of development platform

<table>
<thead>
<tr>
<th>Portability</th>
<th>Longevity</th>
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<tbody>
<tr>
<td>Affordability</td>
<td>Fidelity</td>
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<tr>
<td>Compatibility</td>
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Comparative Study of Virtual Environments for Teaching

<table>
<thead>
<tr>
<th>Development Environments Evaluated</th>
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<tbody>
<tr>
<td>Second Life</td>
</tr>
<tr>
<td>OpenSim</td>
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<tr>
<td>Google Earth</td>
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<tr>
<td>Unity Engine</td>
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Development of the Village in Second Life
Gathering Data for the Simulation

Data Gathered

- Building photographs
- Videos of village tour and interviews
- Elevation data
- Publications on the history of the village
Layout of the Simulator

El Cerrito Village, Second Life

El Cerrito Village, New Mexico

Pecos River
The School House
The Church
Acequia Madre
Building the Virtual Village

Scale and Placement
- Limited space on a simulator
- Orientation & layout of the village
- Building scale vs. avatar scale
- Terrain scale vs. building scale

Photo Sourced Textures
- Captured on digital camera
- Edited in Photoshop to SL requirements
- Uploaded and applied to objects in SL
## Virtual Field School Simulates

### Village Structures
- Church & Plaza
- Houses & yards
- Water pump & tank
- Walls, fences
- Domesticated animals
- Foliage
- Vehicles & Litter

### Surrounding Elements
- Mesa Cliffs
- Trees
- Low lying ground cover

### River
- Dam
- Acequia

### Long Lots
- Gates for fields
- Irrigation runoff to river

### Roads
- Bridges that provide access to the village
- Village streets
# Additional Items in the Virtual Field School

<table>
<thead>
<tr>
<th>Info Cones</th>
<th>Virtual Classroom</th>
<th>Signage Displays</th>
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<tbody>
<tr>
<td>Video tours</td>
<td>Hay bales</td>
<td>Instructions</td>
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<tr>
<td>Interviews</td>
<td>Slide Projector</td>
<td>Map &amp; guides</td>
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<td>Information pages</td>
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<tr>
<td>Self-Assessment activities</td>
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<tr>
<td>Surveys</td>
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Video of Virtual El Cerrito
Developing the Course
Designing the Course

Choosing the format

A hybrid approach

One-on-one faculty consultation

Course planning matrix
## Planning Matrix

<table>
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<tr>
<th>Modules</th>
<th>Objectives</th>
<th>Ungraded</th>
<th>Graded</th>
</tr>
</thead>
</table>
| The Hispano Homeland     | 1. Identify the physical elements and cultural processes leading to the development of an archaic folk culture.  
2. Justify the Hispano Homeland as an archaic folk culture.  
3. Identify reasons that the other Spanish Homelands did not develop archaic folk cultures.  
4. Develop a justifiable argument for why the Pecos Enclave was probably the longest persisting and least degraded area of archaic folk culture in the Hispano Homeland. | Video:  
• Module intro video                                                                                                                                                                                                 | Discussion Assignment: If someone were to ask you to tell them what an "archaic folk culture" is, how would you define the term for them? Why do you think a Spanish-based archaic homeland arose in New Mexico and not in the other homelands?  
Written Assignment: Reflection on Virtual Field Visit |  

### Video:
- Module intro video

### Readings:
- Chapter 1 from The Hispano Homeland  
- Culture of a Contemporary Rural Community by Leonard and Loomis

### Village Visit
- A Walk Along “the Ditch” (Bright Red Cones 1 – 6).  
  - This sequence will take you on a tour of the ditch up to the dam, discuss the history and importance of the ditch, terrace levels, El Barranco, Canyon de Pena, ditch association, and other information about the ditch.

### Attend live lecture (in Second Life)
Developing the Course

Course material

- Discussion Forum Activities
- Extra Credit Activities
- Final Project
- Online Mini-Lectures
- Use of Media Cones

Building the course in our LMS
Delivering the Course

- Scheduling issues
- Training the students
- Communicating online
- Guest speakers
Training the Faculty

Acclimating the faculty to online teaching pedagogy
- Facilitating forum discussions
- Managing communication
- Managing LMS course site
- Delivering lectures in Second Life
Second Life Technical Support

Second Life Class Session
- voice troubleshooting
- slides for the classes

Second Life technical troubleshooting
- voice chat
- video card / network performance issues
End of Course Survey Results
Lessons Learned & Looking Ahead

- Keep the hybrid format
- Add an additional F2F Second Life training session
- Add instructor-led “walks” in the village
- Add more collaborative learning elements
- Add more “gaming” elements
- Increase instructor participation in discussions
- Address faculty’s feeling of disconnect
- Don’t apologize for the technology
The ability to independently walk around EL Cerrito to get a sense of the environment and peer into the (digitally) well preserved history of the village is nothing less than extraordinary.

- student comments

It is amazing to me that we are able to recreate a real life village on the computer, and allow people to tour and research this place. I am all for Texas State and other universities pursuing more opportunities like this one.

- student comments

Project Website: http://bit.ly/IRB5pF