

GOING IN-WORLD

Exploring Multi-User Virtual Environments for Online Teaching and Learning

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Aim of the Paper

Share initial experiences and impressions about multi-user virtual environments, especially Second Life

Draw some implications to online teaching and learning

What is a MUVE?

A multi-user virtual environment (MUVE) is an interactive computer simulation of a geographical area where features of the environment are represented by computer graphics. A player uses a mouse to lead an avatar into and navigate within that world.

Blaisdell, 2006

Examples of MUVES



Membership Community Parents Toys Mobile

Language Select

PLAY NOW!

FEATURED IGLOOS - FEBRUARY 20



Your World. Your Imagination.

Join Now

Have fun, flirt, or simply flaunt your creativity in a world where you can experience and create anything you can imagine.



Photo by Noelani Lightfoot

Out of the box, OpenSimulator can be used to simulate virtual environments similar to [Second Life™](#), given that it supports the core of [SL's messaging protocol](#). As such, these virtual worlds can be accessed with the regular [SL viewers](#). However, OpenSimulator is neither a clone of Second Life's server nor does it aim at becoming such a clone. On the contrary, OpenSimulator lacks support for many of the game-specific features of Second Life (on purpose), while pursuing innovative directions towards becoming the bare bones, but extensible, server of the 3D Web.

General

- [Main Page](#)
- [News](#)
- [Foundation](#)

For Administrators

- [download](#)
- [Running](#)
- [Configurator](#)
- [Building](#)
- [FAQ](#)
- [Support](#)
- [Report a Bug](#)

For Grid Users

- [Connecting](#)
- [Grid List](#)
- [Screenshots](#)

For Creators

- [Content Creation](#)
- [Scripting](#)

For Developers

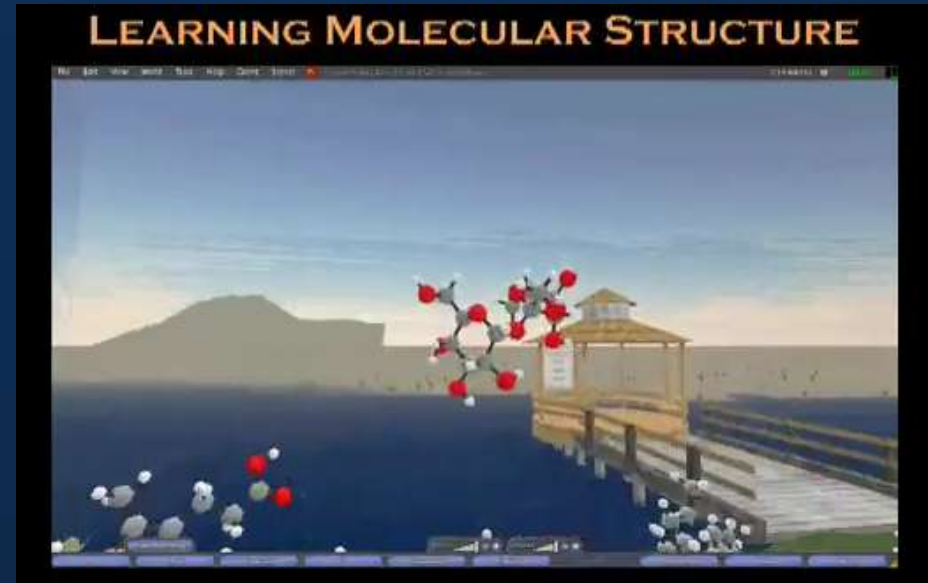
- [Dev Home](#)
- [Dev Team](#)
- [Testing](#)

Downloads:

MUVEs for education



Typical Video game:
Enemies attack your
avatar



Educational MUVE:
Characters answer
questions or give
information

MUVEs for education

With educational MUVEs, instead of warding off opponents, searching for gold, or racking up points, players have only one goal: learning.

Blaisdell, 2006

Second Life



- Launched in 2003 by Linden Lab
- Residents explore the Grid and interact through avatars
- For people aged 16 and over
- Over 100 regions dedicated to education
- Most preferred virtual world (76% in 2010)



Communication Tools

- IM, Chat, and Voice Chat
- Friends and Groups

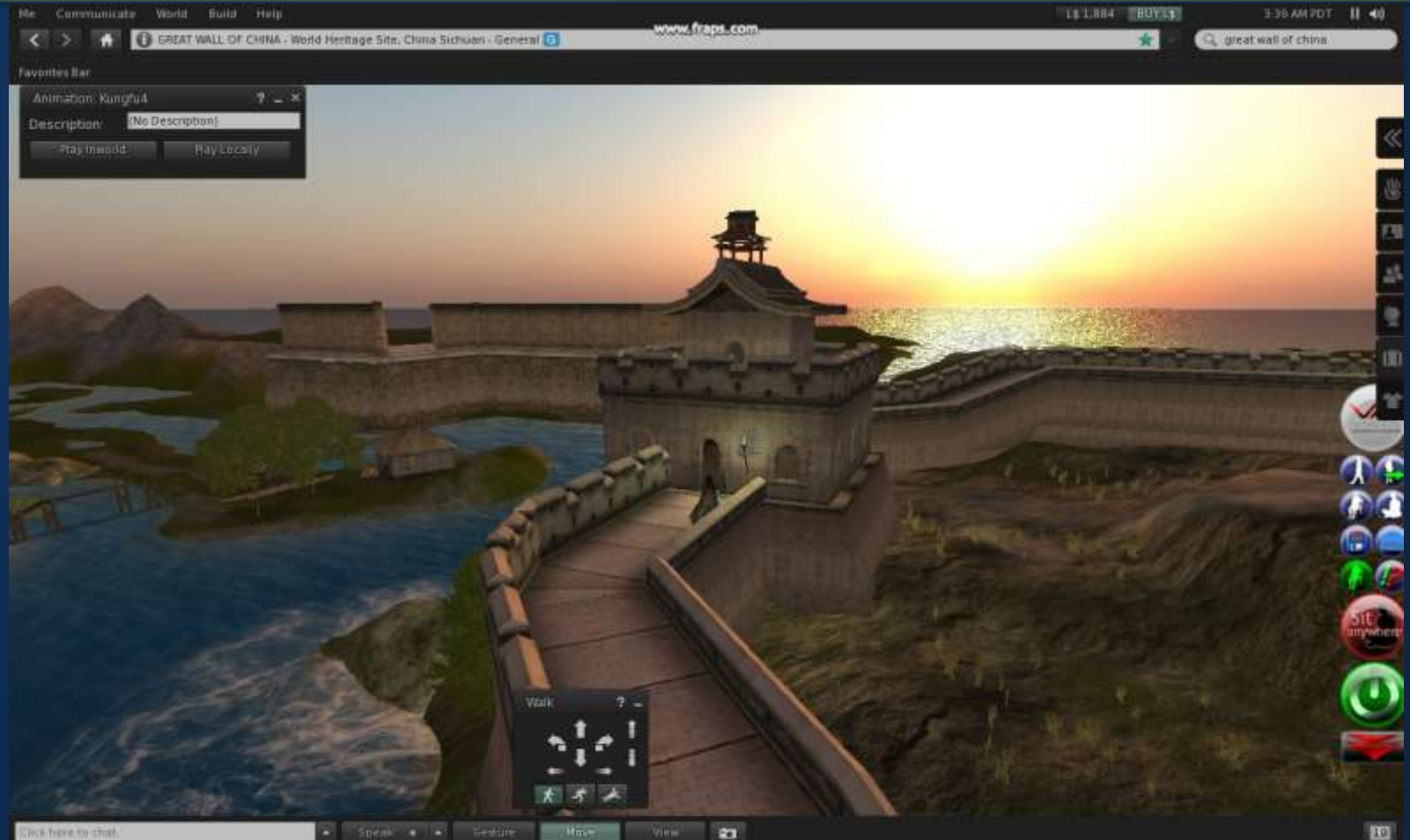
Creation Tools

- Appearance
- Terraforming and Building
- Programming / Scripting

49 Major categories

3200 + destination sites

Second Life Basics



in world

Second Life Basics



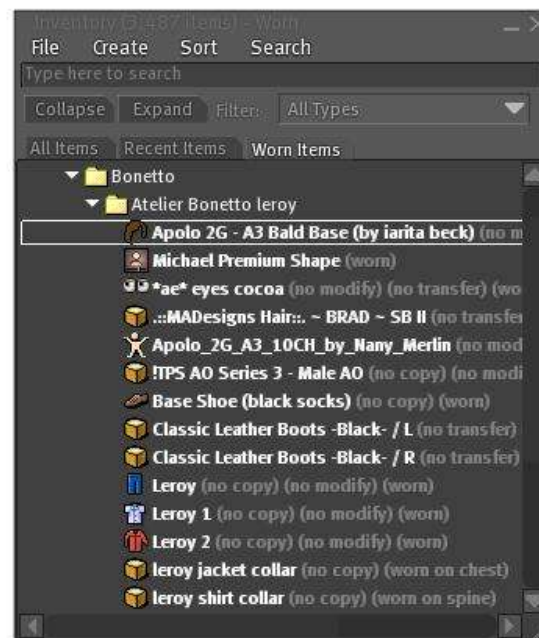
avatar
alt
noob

Second Life Basics



wear
detach

clothes
shoes
hair
skin
shape



Second Life Basics



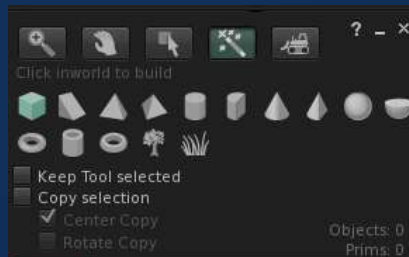
Second Life Basics



prims

sculpties

scripts



General

Obj

Name:
Description:
Creator:
Owner:
Group:

Click to:
 For Sale:

Anyone:
 Move
Next owner:
 Modify



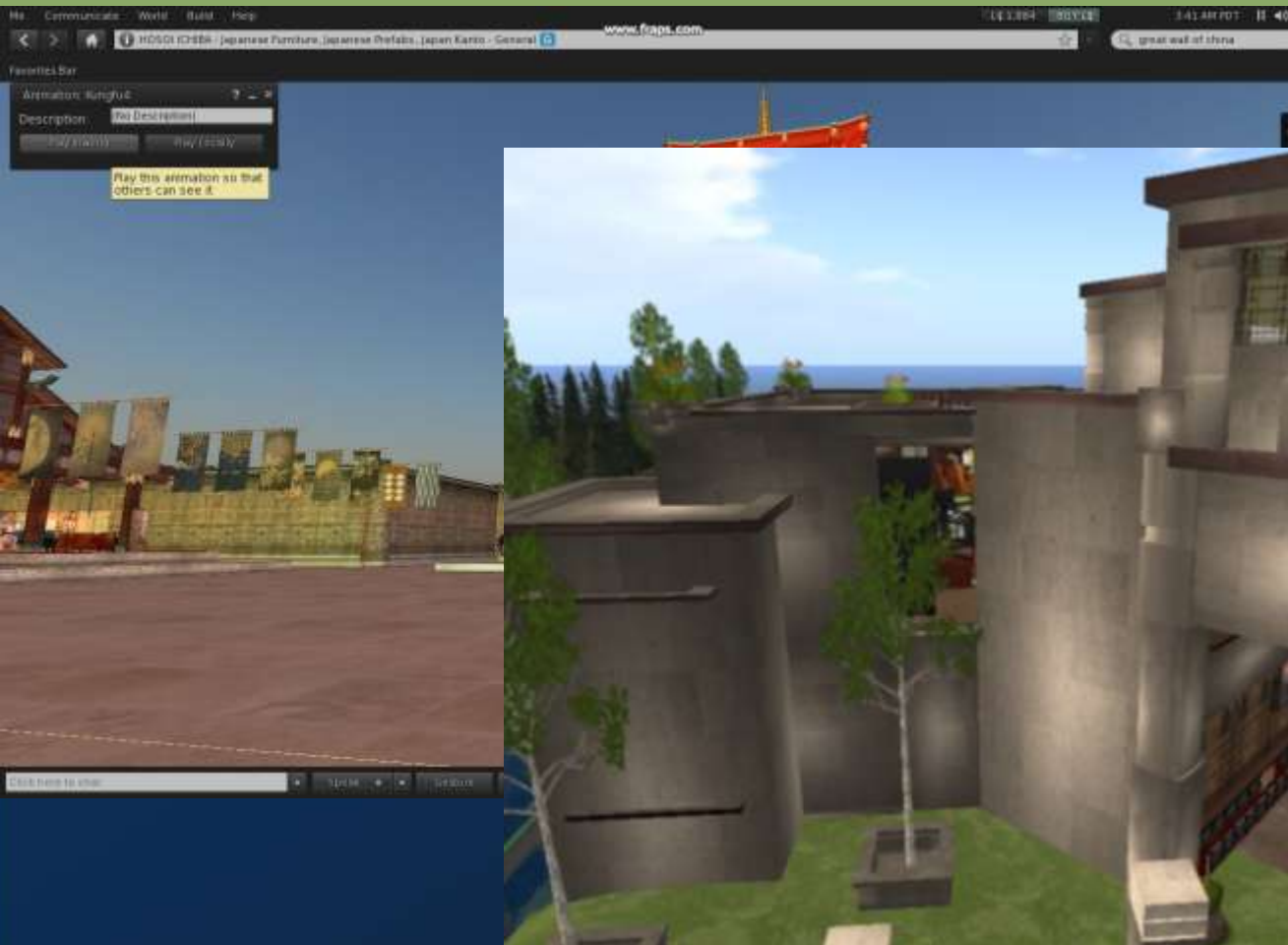
Second Life Basics



teleport
“tp me”



What do residents do in SL?



explore sims

What do residents do in SL?



dance

What do residents do in SL?



shop

What do residents do in SL?



read

What do residents do in SL?



fly

What do residents do in SL?



sail

What do residents do in SL?



scuba dive

What do residents do in SL?



tell, read, listen to stories

Going In-World: MUVES

QuickTime™ and a
H.264 decompressor
are needed to see this picture.

What do residents do in SL?

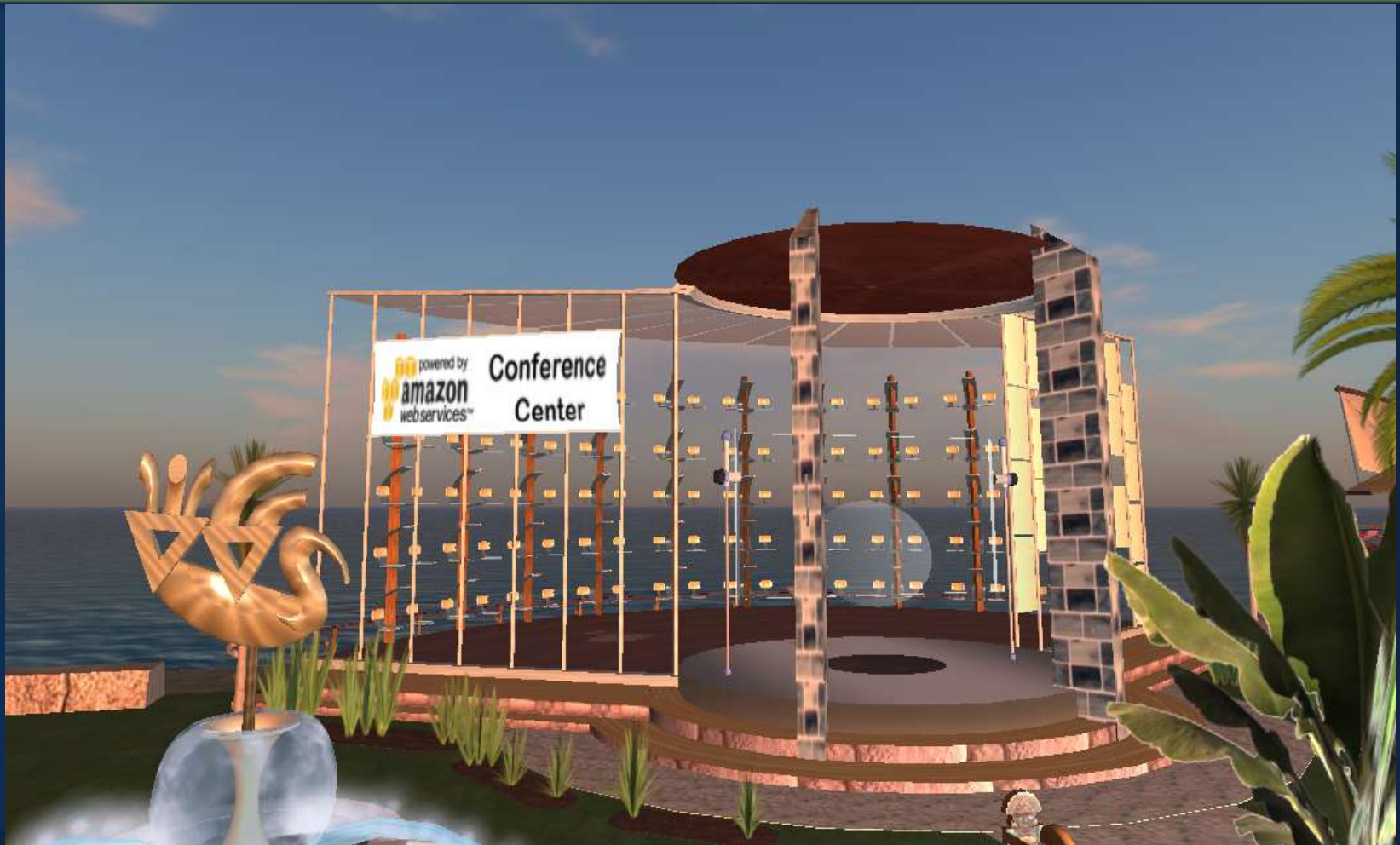


practice religion

What do residents do in SL?

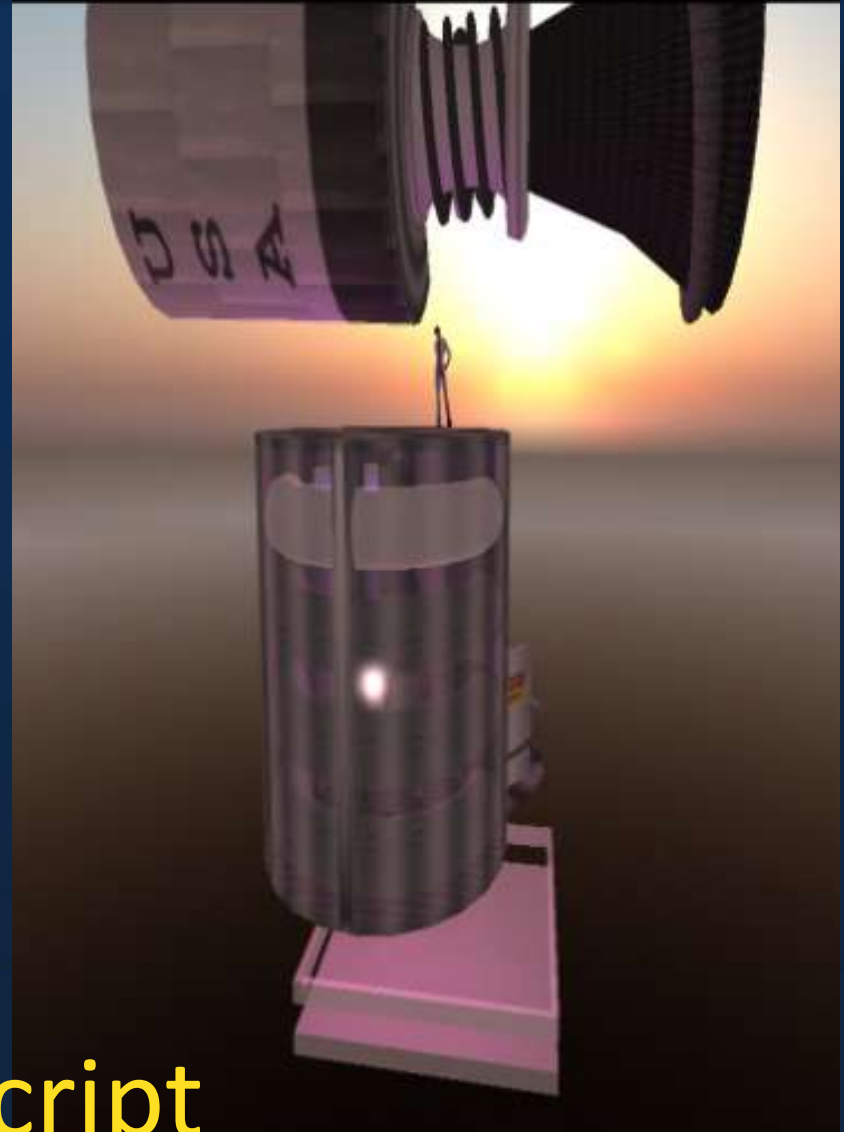


What do residents do in SL?



attend conferences

What do residents do in SL?



build and script

What do residents do in SL?



make friends

What do educators do in SL?



virtual campus

What do educators do in SL?



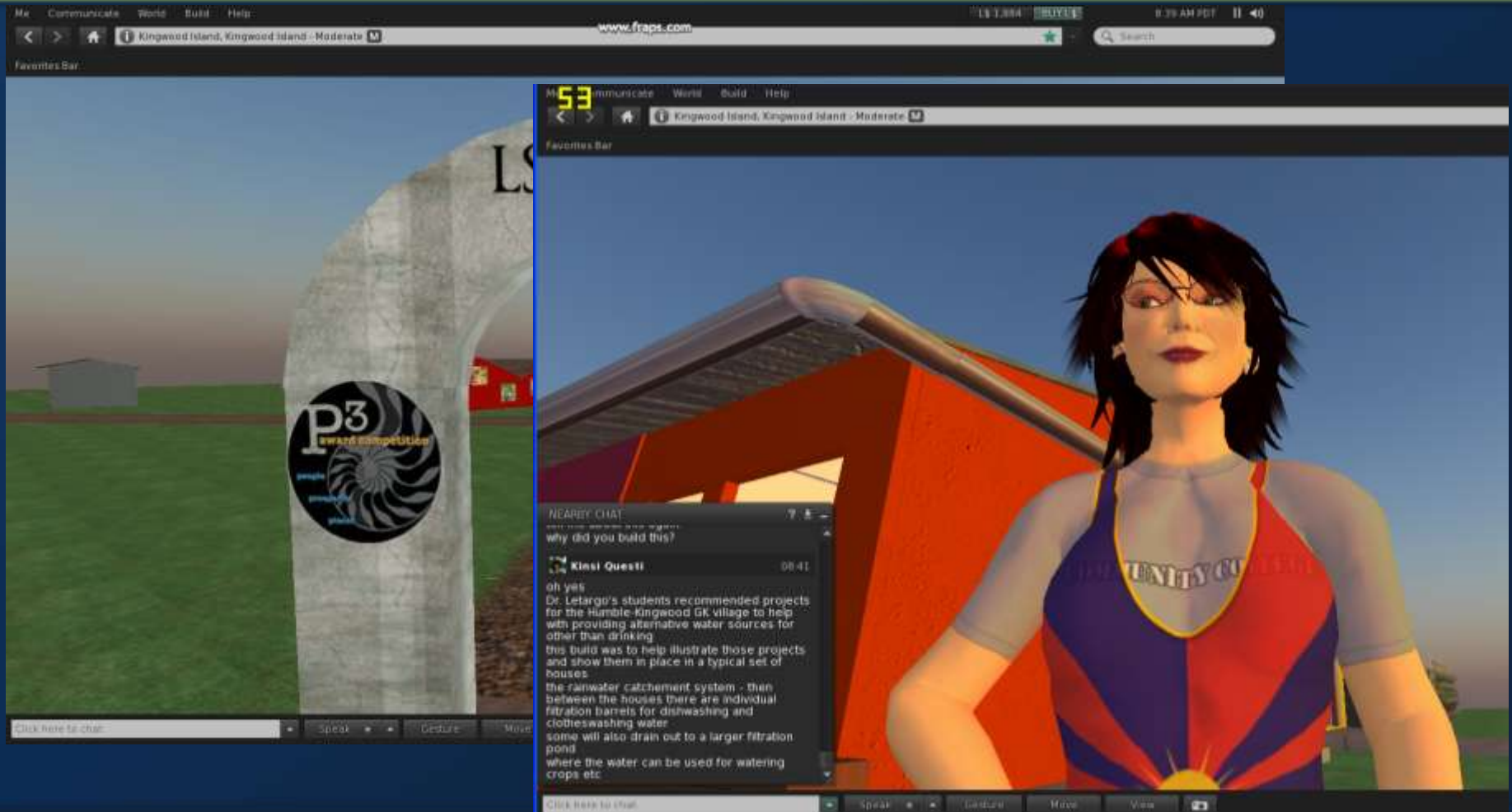
online class

What do educators do in SL?



simulation

What do educators do in SL?



service learning

What do educators do in SL?



virtual field trip

What do educators do in SL?



exhibit student work

What do educators do in SL?



network

What do educators do in SL?



professional development

Some academic showcases



Shakespeare's Macbeth in Second Life

Some academic showcases



ARCHI 121

Some academic showcases



The Life and Times of Uncle D

Some academic showcases



Etopia Eco-Village

Some academic showcases



Medical Examiner's Office

Some education sites



Bio-Medicine Research Labs

Some education sites



Rockcliffe University Consortium

Some education sites



ISTE Island

Some education sites



Mayo Clinic

Some education sites



Post Graduate Medical School

Some education sites



Virtual Africa

MUVEs and LMS

Learning Management Systems

(e.g., MOODLE)

- features allow for scaling to very large deployment of students
- enables course content delivery through multiple resources such as uploaded files and links to internet-based resources
- has performed well in discharging the functions of online DE learning

MUVEs and LMS

Learning Management Systems

(e.g., MOODLE)

Limitations are apparent in courses with laboratory, clinical, or practicum requirements



SL + MOODLE = SLOODLE

What is SLOODLE?



**Simulation Linked Object Oriented
Dynamic Learning Environment**

Wha

What is Sloodle?

Second Life

Virtual Environment

- Avatars
- 3D construction
- Interactive scripts
- Immersive settings
- Virtual manipulatives

Moodle

Learning System

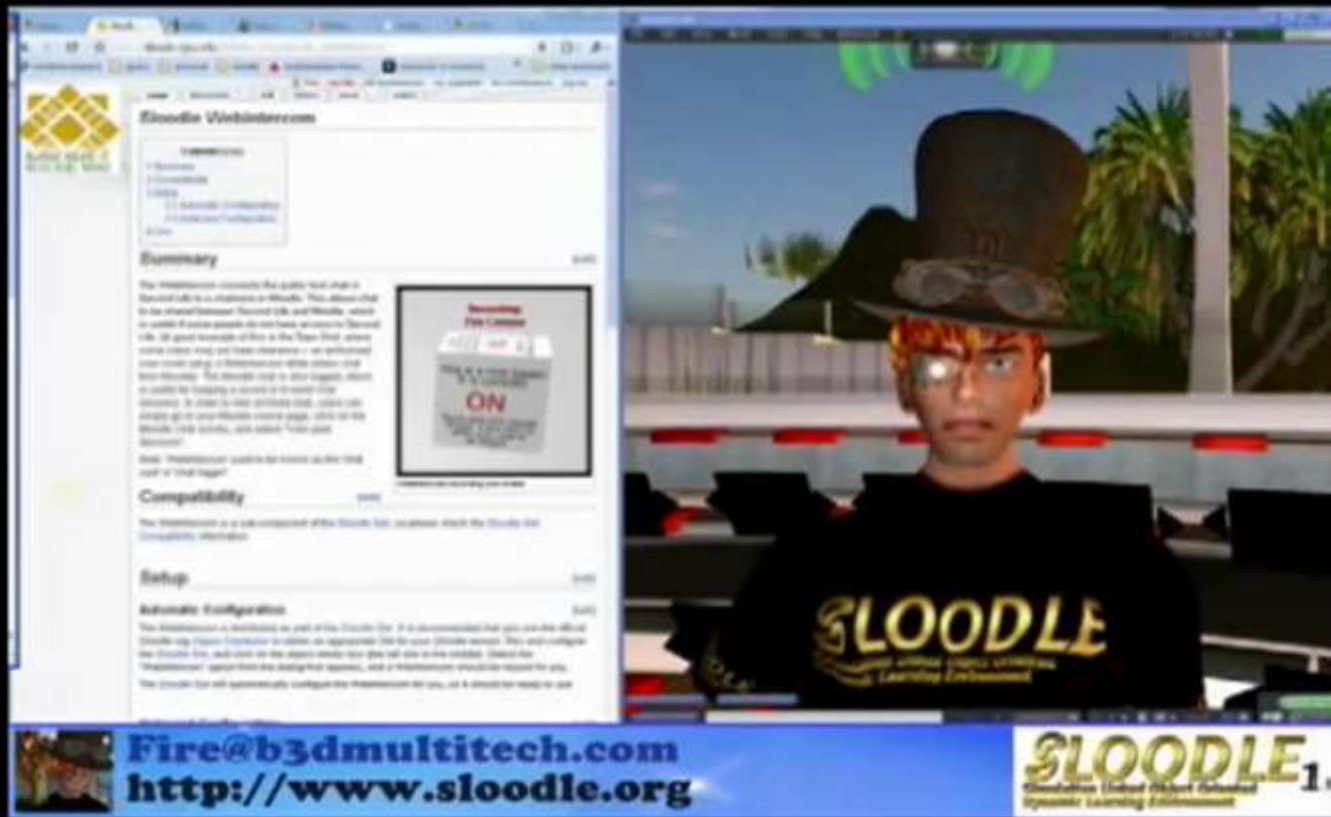
- Structured lessons
- Threaded discussion
- Assignment drop-box
- Self scoring quiz
- Roster / grade book
- Long-form documents

SLOODLE

Simulation-Linked Object Oriented Dynamic Learning Environment

Touch, walk through and fly around learning exercises mirrored on the Internet and the Metaverse. Blocks in Moodle become 3D objects in Second Life. Chat logs, objects and Second Life snapshots become contributions to the Moodle classroom. Two developer communities come together to create entirely new teaching tools that motivate while offering hands-on exploration.

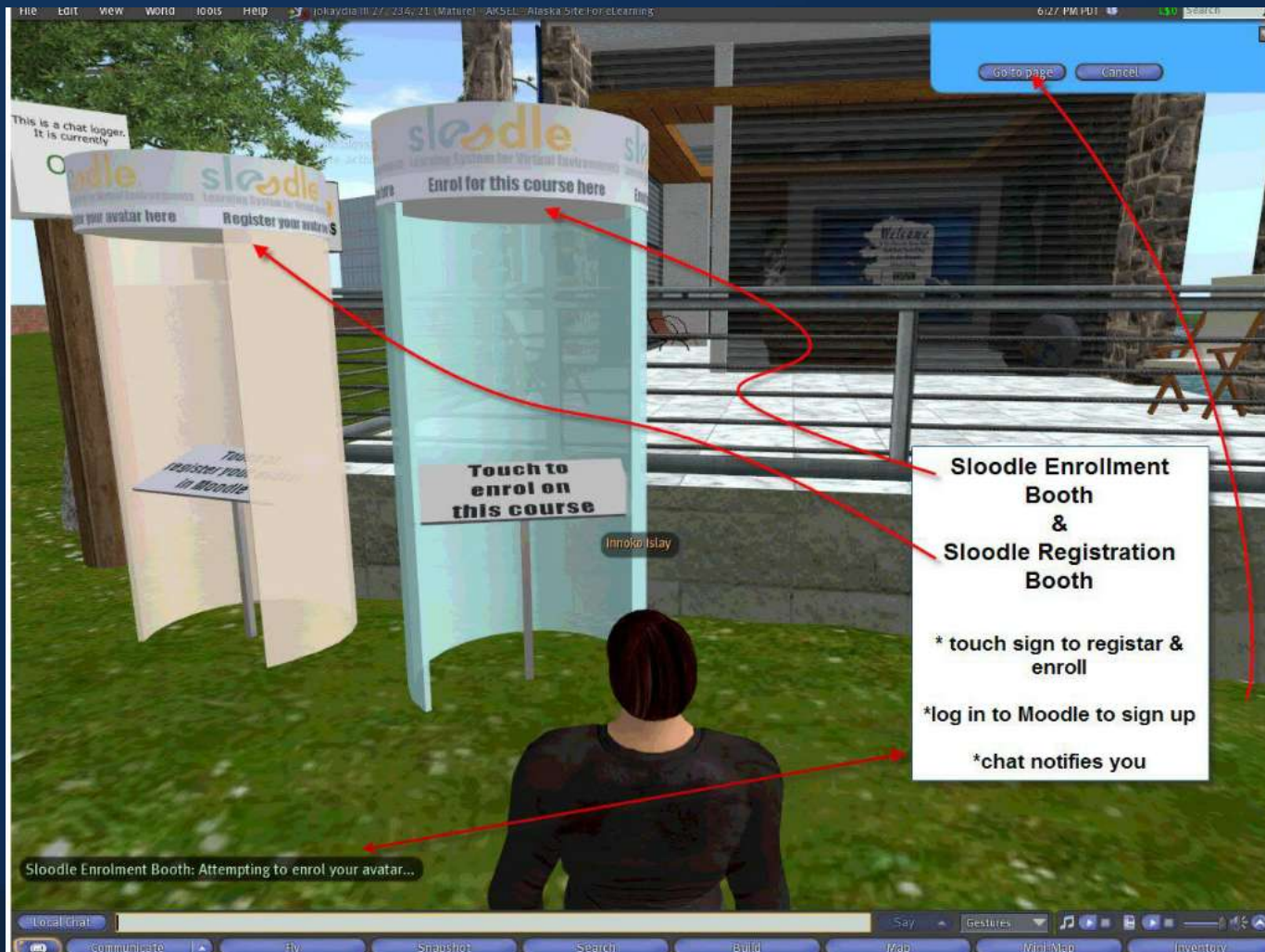
What does SLOODLE do?



The screenshot displays a video player interface. On the left, a web browser window shows the 'Sloodle Webintercom' page. The page includes a logo for 'Sloodle' (a yellow diamond pattern) and a 'Summary' section with text describing the software. A small image of a 'Sloodle' box is visible. Below the summary are sections for 'Compatibility' and 'Setup'. At the bottom of the browser window, a blue banner contains the email 'Fire@b3dmultitech.com' and the URL 'http://www.sloodle.org'. On the right side of the video player, a 3D character is shown wearing a black top hat with goggles and a black t-shirt with 'SLOODLE' printed in yellow. The character is standing in a virtual environment with palm trees and a blue sky. A blue banner at the bottom right of the video player features the 'SLOODLE 1.0' logo and the text 'Sloodle: Using Virtual Worlds to Enhance Learning Experiences'.

Web-intercom

What does SLOODLE do?



Registration Booth

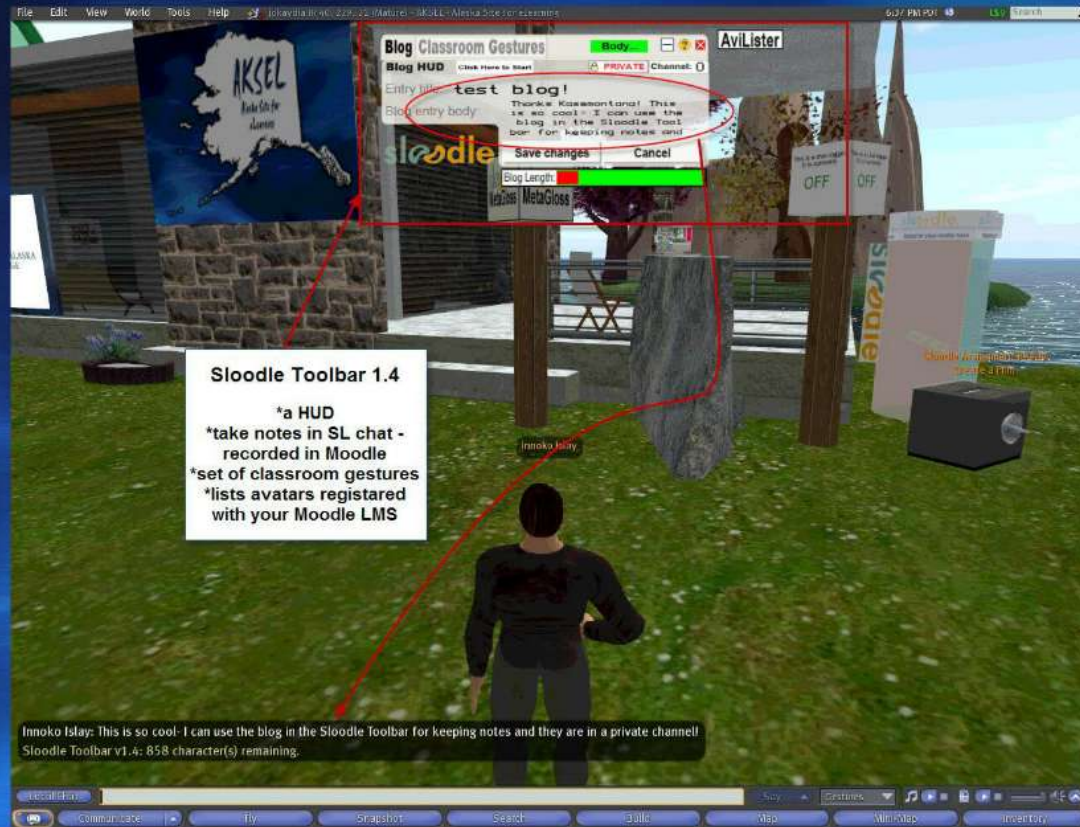
What does SLOODLE do?



Quiz Tool and 3D Drop Box

What does SLOODLE do?

Sloodle Toolbar 1.4



SLOODLE Tool Bar

Concerns/Questions

When do we use MUVEs?

What kind of environment and artifacts are essential for teaching in a MUVE?

What learner factors influence the teaching and learning process within MUVEs?

Concerns/Questions

Requirements/challenges in setting up such a learning environment:

- instructional design
- technology, access, cost
- faculty development
- student support



Thank you from Namaste Island, SL