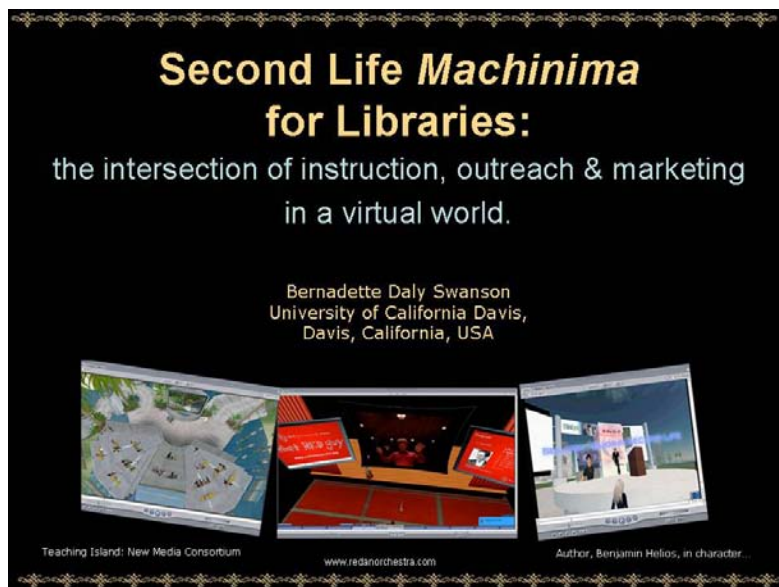**Second Life *Machinima* for Libraries: the intersection of instruction, outreach and marketing in a virtual world.**

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Abstract

The virtual world of Second Life is a global community of creativity, collaboration, commerce and entertainment with the number of resident accounts now over 8 million ("Linden Research"). The immersive and visually rich environment is a natural for multimodal instruction, collaboration and interaction. The Second Life browser software comes equipped with build-tools, group options, communication tools such as chat and instant messenger, and a menu-driven video capture tool for users to record "machinima" of their experiences, simulations or live events. Machinima is familiar to millions of gamers around the world and is defined as "animated filmmaking within a real-time virtual 3D environment" ("3D Game Based" 1). This paper provides a practical look at how we can connect with millenials and adults using machinima, and suggests ideas for individual and collaborative story

and content development for sharing with socially networked online communities in Second Life and on the web.

My introduction to Second Life via the Second Life Library

It was a blog posting about the opening of the Second Life Library and a request for volunteers that catapulted me into my second life in October 2006. I registered at the Second Life web site with a free account which required choosing a name and an avatar to represent me in the virtual world. I downloaded the software and logged in.

After a brief stay on Orientation Island with other new arrivals from around the world, I headed for the Library. The "Library" was actually a couple of islands with many individual libraries from around the world, including the Second Life Library 2.0, founded by Lori Bell and Kitty Pope of the Alliance Library System.

By spring 2007, there were 10 islands 10 partner islands. The Alliance and an international team of volunteer librarians provided 40 plus hours of "in world" reference service per week from the main teleport landing on Info Island I. The archipelago of islands receives 5000 visitors per day, and the Eye4YouAlliance Island in Teen Second Life receives 2000-3000 teen visits ("Hurst-Wahl"). So, how many librarians are involved? Group statistics, accessible via the Second Life browser, show 518 self-identified librarians in the *Librarians of Second Life* group and over 1000 members in the *Second Life Library Guests* group. Not surprisingly, the Alliance is the 2007 recipient of the *ALA/Information Today Library of the Future Award* and a finalist in the *Sirsi Dynix Building Better Community Awards.*

I now have two avatars working on the library projects, HVX Voyager is in Teen Second Life and my second account, HVX Silverstar, represents me on the main grid.

I work a weekly reference shift on Info Island I, and provide machinima instruction for the Machinima Silver Screen Institute on the ALA Arts Island. Learning to create machinima in Second Life has allowed me to begin to document and promote my own activities, create a story-based machinima instruction series with a shared machinima project and to record the work of the Second Life Library and other related library and educational initiatives (in process).

So What is Machinima? a Look at its History and Popularity

Emmy winning animator, and Executive Director of the Academy of Machinima Arts & Sciences, Paul Marino, acknowledges that machinima is a tricky concept to grasp. He describes it as a "marriage of mediums; a mixture of the creative platforms, filmmaking, animation and 3D game technology" ("3D Game Based" 1). He positions machinima as *" a medium to revolutionize visual-based storytelling as we know it"* ("Academy of Machinima. Arts").

The term machinima is a portmanteau of *machine* and *cinema*, and is familiar to millions of gamers of all ages. Machinima is not new; it has been around for more than a decade. The machinima movement started in 1993 when the developers of the multi-player Doom game released it with a program that supported the recording and playback of in-game actions (Jenkins, 152). In 1996 a university student in Scotland, Hugh Hancock, made video game history. Along with his Rangers Clan from the popular Quake game, he used the recording tool meant for "in-game" video creation and viewing and made modifications that resulted in the first demo for playback outside a game, the 90 second *Diary of a Camper* ("3D Game Based" 6):

> *"The rangers choreographed the players as actors, hitting their marks while another player acted as the camera, recording the actors as the scene progressed. The actor players also typed n dialogue that appeared in the recording. Once completed, the demo served as the very first machinima film – a narrative story told within a game space"* (Ibid.).

Hancock went on to found the Machinima.com site, a socially networked site for professional and amateur machinima artists and enthusiasts. Machinima can now be seen in mainstream film festivals where it is picking up awards.

Why should we be interested in Machinima Production for our Libraries or Library Users?

Machinima offers us a vehicle to work with library staff and library users (millenials and adults) to create a variety of content that can be used, shared or "mashed up" (mixed together with other media to create "new media"). It's recreational and educational and can be shared on many of the social networking sites where young people are currently publishing and sharing content. Wikipedia lists 90 sites with social features and some supporting video ("List of social networking").

Participatory Culture:
invited to create & circulate new content
"Convergence involves both a change in the way media is produced and a change in the way media is consumed."

Role of publisher & information consumer

Henry Jenkins, Convergence Culture: Where old and new media collide. (New York: New York University Press, 2006), p. 15.

Henry Jenkins, media analyst and Director of the Comparative Media Studies Program at MIT, looks at this participatory culture, and collective intelligence in his book, *Convergence Culture: where old and new media collide.* He describes this *convergence* as:

> "the flow of content across multiple media platforms, the cooperation between multiple media industries and the migratory behavior of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want." (Jenkins, 2).

Jenkins writes that in this new *participatory culture* fans and information consumers "are invited to actively participate in creation and circulation of new content" (Jenkins, 290). Second Life *machinima* and *other shared media creation* positions libraries with opportunities to move into a new environment and a way to connect directly with library users and the broader community.
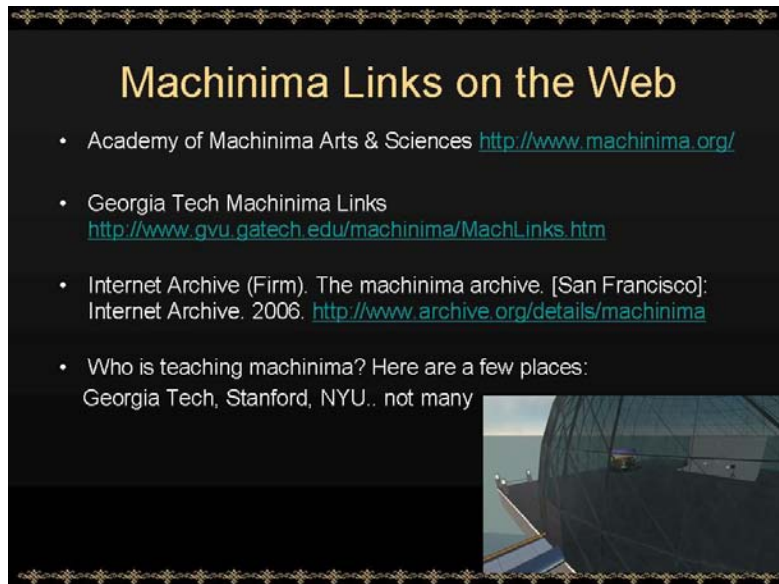

Communication Tools
technology support & Applications for Machinima

• Chat & instant messenger (IM)
• rich real-time 3D graphics
• build-tools
• import and export tools

• Voice Beta (for integrated voice)

• Quicktime video, Http requests, streaming audio blog to the web, search web sites (Google, PubMed, Wikipedia, etc. from Second Life…
• Scripted cameras & FTAPS (PCs) Snapzprox2 (mac)

Correction: "FRAPS"

Second Life, though not a game, is a familiar looking environment to many young people and adults. It looks and feels like a massively multiplayer online role-playing game (MMORPG). It's collaborative. It's economical. It provides us with the opportunity to learn new skills that can be applied to both the virtual world and in telling our stories through machinima across multiple media platforms. Being early adopters allows us to gain experience and later provide orientation and instruction to interested library users exploring virtual worlds and related online communities.

Applications for Machinima:

Today, machinima created in games and virtual worlds such as Second Life is shared on socially networked video hosting sites across the web, used for podcasting and screencasting as well as for demonstration, entertainment and for educational purposes. Second Life machinima can be created and reformatted for the web, television, DVDs and large display screens seen in libraries, schools and stores, etc. It provides us with an economical way to create visual media that can be used for instruction, outreach and marketing purposes.

The native video format for macs is Quicktime which is supported by Second Life for streaming onto screens and objects for avatars to watch. One of the best machinima screenings I have seen was at a drive-in theater in Second Life. The built-in video capture in Second Life allows you to save in a variety of formats including uncompressed and compressed AVI which can be converted to Quicktime. There is a learning curve, but it is not insurmountable; the Second Life Knowledge Base provides instructions outlining the process ("Second Life Knowledge Base").

Machinima production experience prepares us for larger "open" media projects in the future. Wikipedia describes "open content" (as in the case of an "open movie") as any kind of creative work (including articles, pictures, audio and video) that is published in a format that explicitly allows for copying and modification of the information by anyone. Currently, the largest open content project is Wikipedia ("Open Content").

Machinima Research Projects & Experimental "Open Movie" Model:

Notable academic institutions such as Stanford and MIT are exploring machinima and other new media: *The Machinima Archive* is a collaborative effort of the Internet Archive, the *How They Got Game* research project at Stanford University, the Academy of Machinima Arts and Sciences, and Machinima.Com ("Internet Archive") and MIT's Machinima Group project led by Beth Coleman. (Ray). One of the first open movie projects on the web was Stray Cinema, which the developers describe as an *"an experiment that combines filmmaking with online information sharing"* ("Stray Cinema"). The Stray Cinema model invites users to submit video and audio and create movies from the raw footage available from the site. It also provides community features including screenings and competitions and appeals to the community to provide footage for the 2008 Stray Cinema.

Third-party Machinima Capture Tools:

The video capture feature in the Second Life browser allows the user to save in a variety of video formats (including international video formats used for DVDs, NTSC and PAL, and many others). Alternatives for capturing smoother video in Second Life include using a high resolution mouse enhance work if using the built-in camera. Preferable for professional movie capture are tools such as the free Alt-Zoom scripted camera or similar scripted cameras available for purchase within Second Life. These items can be located using the search function in the Second Life browser. Third-party software such as FRAPS (US$37) for PCs is optimized for games and can capture video at up to 100 frames per second depending on limits in the game. It is the best PC option for creating Second Life machinima ("FRAPS"). SnapzPro X2 (US$59.00) is used for macs ("Ambrosia Software").

Flash drives or accessible storage for video files should be considered before embarking on machinima instruction on public computers or in computer labs. Once recorded, videos can be uploaded to free public video hosting sites with online editing features for video and the original files can be deleted. Organize your tours and recording using social networking sites with added features such as

online editing or music mash-ups for video. Some of the new video sites with editing features for video and in some cases audio and "mash-ups" with images and video: eSocial, JumpCut, Grouper, Eyespot, Motionbox, Dabble, VideoEgg ("Online Video Editing")

How Can Libraries Use Machinima for Instruction Purposes?

There are a lot of options for educators and librarians regarding teaching and learning in Second Life. The Second Life Educators discussion list (SLED) offers solutions and shares experiences on all aspects of teaching including technologies and learning spaces ("SimTeach.com"). The immersive, engaging and visually rich multi-modal learning environment is unlike traditional teaching environments. Flying, teleporting and creating objects in real-time are just a few of the options open to students and educators.

Suggested Ideas for Instruction using Machinima:

In-person Instruction:

Formal:
- Design Filmmaking group projects incorporating information literacy skills, active learning, critical thinking and use of technology.
  (Purdue University Libraries' introductory information literacy course uses an 8 week filmmaking project as the final project to advance information fluency) *(Sharkey, 2)*
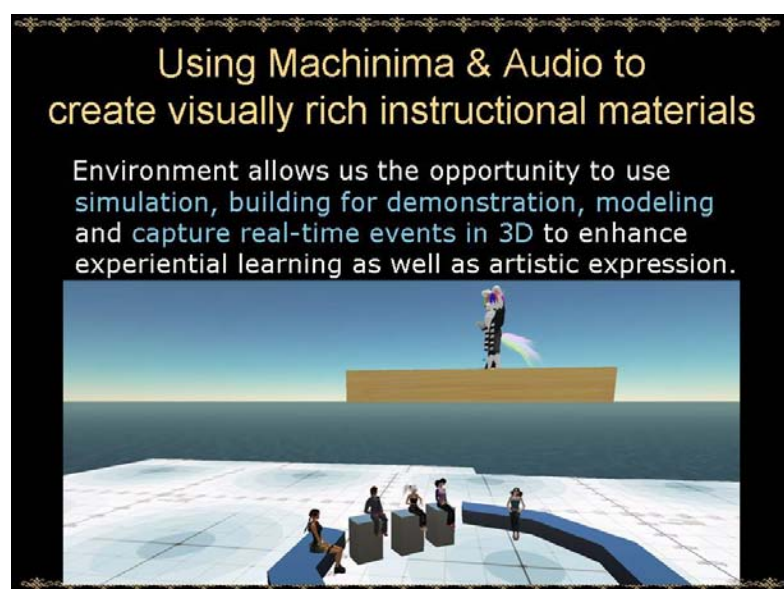
In-formal:

- Offer basic classes with hands-on activities using the built-in machinima tools (learn to use camera focus tool to turn avatar around and capture frontal view, mouseview and group activities)

- Offer storyboarding and post-production classes using free online software and video hosting sites with rich editing features (eg. Yahoo's Jumpcut)
- Hybrid classes for using third-party software such as FRAPS or SnapZProX2 ("in world" for filming and in library for software instruction)

Instructional Programming & Events:
- After-school or summer video boot camps
- Competitions or screenings of machinima

Instruction demonstration or stand-alone videos:

- Use machinima captured in Second Life with other software (eg. Camtasia, Captivate, Breeze). In some cases video may need to be reformatted (eg. flash video files, FLV) or recorded in appropriate format for use in other software (eg. uncompressed AVI)
- Create videos for demonstration purposes in classes or stand-alone instructional videos for web sites, screencasts or podcasts
- Instructional stand-alone videos: use third-party software (FRAPS or SnapzProX2 or Screenography) or a video camera to capture the library's computer screen before logging into Second Life and other web sites or locations on the web.

"Open Movie" projects:

- Create an "open movie" project using online editing sites
- Group editing sites can be worked into instruction and marketing programs allowing users opportunities to create relevant content

How can we use Second Life and machinima in our outreach efforts?

- Build new communities using Web 2.0 sites video hosting sites using their community or group features (eg. Jumpcut)
- Develop partnerships and relationships in new environments (sister libraries, schools)
- Offer programs in local schools and for specific groups in their locations (Rotary Club, etc.)

How can we use Second Life and machinima in our programming efforts?

- Offer services and create programs for specific interest groups (eg. Visit art galleries, book discussions, interactive art displays in Second Life and have staff member create video to share on library web site or their site)

- Teen programs (13-17) using the Teen Second Life grid. If library staff do not have access to the teen grid through a registered project, then teens can work together in the virtual world with a library staff member providing
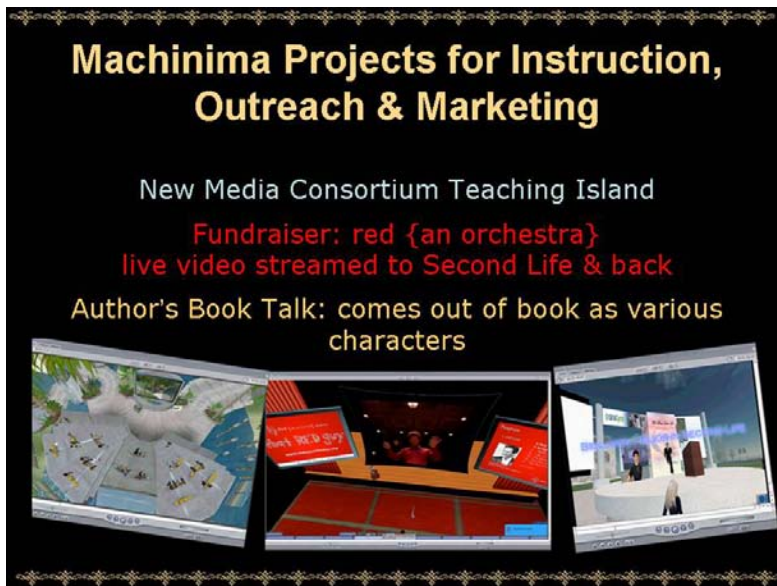
instruction on software, etc. from the library (volunteering on the Eye4YouAllliance project will provide staff with access to the teen grid so that teens and staff member can be present and recorded in the video in Second Life).

- Hybrid classes can be given in real life libraries with the teens, or members from other groups in your community able to shoot their videos in the libraries, universities art galleries, science centers and even shopping malls in the virtual world.

How can we use Second Life and machinma in our marketing?

- Use visually rich environment of Second Life to stage your marketing media (for both print and electronic)
- Create simulations and models to market and promote real-life events; produce machinima for screencasts, podcasts, etc.
- Offer business sponsors and donors customized instruction and orientation to Second Life
- Organize events an fundraisers n both in the Library and in Second Life
- Stream events from the Library into Second Life using a streaming service (eg. New Media Consortium's classical event: Red {an orchestra} performed its concert, *That Red Guy*, both in Cleveland, USA at the Masonic Auditorium and two sites in Second Life ("Red: an orchestra").

Machinima Projects for Instruction, Outreach & Marketing

New Media Consortium Teaching Island
Fundraiser: red {an orchestra}
live video streamed to Second Life & back
Author's Book Talk: comes out of book as various characters

Using the Second Life snapshot feature or machinima to capture Digital Still Images for print materials:

In the fall of 2006, the Wells Fargo Bank machines sported imagery from Second Life. The images used for the bank machine screensavers in Sacramento, California were images of their 3D presence called "Stagecoach Island" in the virtual world of Second Life. Within the client menu of the Second Life software, there is an option of saving the digital images at a higher resolution. The resolution and size of these images can be increased further (eg. 300 dots per inch) in programs such as Adobe Photoshop and then used for print purposes. Capturing images to use for print publications is best done on a large computer screen (19 inches to 30 inches). Photo shoots can be easily staged to mimic real life with the help of props, 3D replicas of real life locations and a variety of landscapes, libraries and geographical replications.

Story-based Machinima Instruction: Second Life Library Program

Story-based Instruction Series
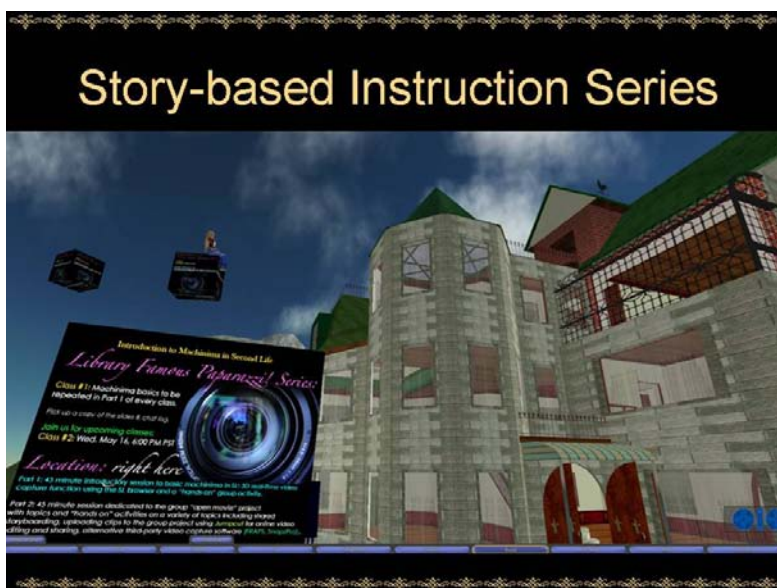
Beginning in April 2007, a story-based machinima instruction series entitled '*Library Famous Paparazzi!"* began with goal of training Info Island volunteers to record machinima of special events and programs. The project (still evolving) includes the development of an "open movie" project, story development, storyboarding, and use of the Jumpcut.com open movie feature to share clips. Clips can be emailed into the account and all members can edit content on the project. Users can access machinima on the site to create unique movie perspectives using the library of clips. The classes are held at the Machinima Institute located on the ALA Arts Island in Second Life.

Second Life Technologies: Voice Beta, Blogging, SLoodle

Linden Research Inc. and self-selected Second Life residents are currently testing a *voice beta* ("Second Life Community Voice Beta") version of the software which would allow for an integrated voice option in the near future. Current non-integrated voice solutions include VoIP technologies (Skype, Ventrillo, Teamspeak) to transmit voice conversations over the Internet. These voice solutions are used by clans in multi-player games to communicate with clan members. For use in Second Life, these products would be open as well as your Second Life software.
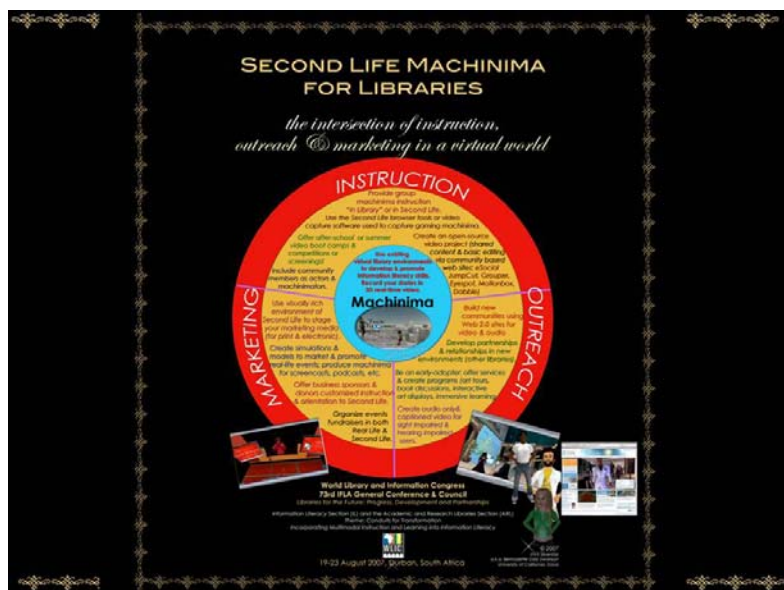

Education related technologies for teaching & learning include SLoodle ("Sloodle Virtual Environment"), a learning system for virtual environments which is currently being used for hybrid courses being taught in Second Life and real life, as well as Second Life based courses. Other technologies supported in the 3D world include: streaming Quicktime video and radio from the Web into Second Life (preferably using streaming video services for consistent streaming). Other technologies supported in the 3D world include: HTTP requests, blogging and searching of web databases, SLQuery database, blogging to the Web, and many more.

The Real Virtual Gap: Cost of Access and the Benefits of Collaboration

For many, the cost of accessing virtual worlds will be too high; requiring upgraded hardware and cable or DSL Internet access. ("Linden Research Inc. System

Requirements"). Libraries or public commons areas will need to be the point of access for many.

In this new collaborative environment, we translate our collective *open stories* into rich visual clips of experiences to be used and morphed into new objects and distributed across media platforms. Jenkins notes that "convergence represents a cultural shift as consumers are encouraged to seek out new information and make connections among dispersed media content." (Jenkins, 3)
For libraries and librarians, participation in this new media system requires us to take on new roles along side our neighbors as both "media producers and consumers" (Ibid.).
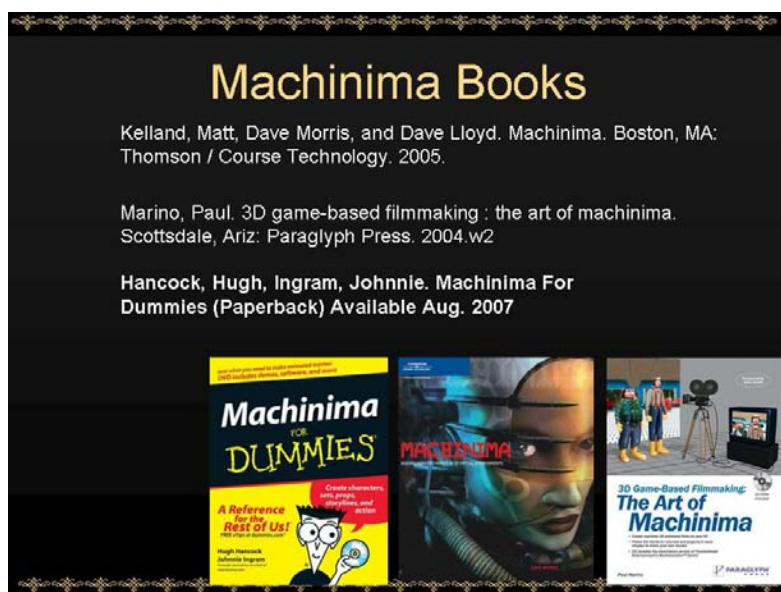
Through our own immersion into virtual worlds, open projects and working closely with our users, we can integrate new skills and expertise into instruction, library outreach and marketing efforts. A theme-based group instruction series and "open movie" project affords us opportunities to tell our individual stories and to collaborate on a shared story that can be reflected in the project machinima footage. Moving from small machinima projects to larger collaborative "open" projects with our library users (virtual and in real life) truly offers us the first steps into the participatory media culture.

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