

Virtual Worlds: An Educational Medium for a New Century

GLOBAL KIDS SHARES BEST PRACTICES ON HOW TO USE VIRTUAL ENVIRONMENTS LIKE **SECOND LIFE** IN EDUCATIONAL SETTINGS AND PREPARE STUDENTS FOR A MEDIA SATURATED WORLD.

BY RAFI SANTO

In a recent internal professional development training held in the educational nonprofit I work for, staff were asked to reflect on the challenges they encountered when in high school. After reflecting, they were asked to re-imagine how those challenges might be encountered by the youth they work with today, and to think about how things have changed from when they were in high school. The response that the majority of educators gave was essentially the same. "They're all hooked into iPods." "They do their research on Wikipedia." "Constantly texting each other." "MySpace!!!" Information technology is pervasive in the lives of young people. Its ubiquity is unprecedented.

Media Literacy, as a movement, emerged out of the need to expand what was traditionally considered literacy in lieu of technological innovations like television, radio and cinema. Understanding how to analyze and evaluate the media that was regularly being consumed became critical to living in a world saturated by it. But as new innovations in technology take hold in mainstream culture and change its constitution, we find ourselves at a

moment in time when those expansions themselves need to be broadened.

As media shifts from being a largely top down consumed experience to a participatory phenomenon, new media literacies have been developed. Skills like simulating real-world systems and environments, judging the credibility of information, learning to network in order to find information or skilled individuals and navigating across multiple media modalities are examples of the kind of skills laid out by MIT's Henry Jenkins in a now widely circulated white paper entitled *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*.

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Jenkins and a host of other academics and practitioners are examining the contours of this new user-generated and media culture, and theorizing what it means for today's youth. While there are many differences of opinion on what specific effects these new media will have on culture at large, a consensus has emerged that there needs to be a response on the classroom level to educate young people and the adults that educate them on how to engage constructively and responsibly with participatory media.

At Global Kids, our response to this new environment has been to explore these emerging media through educational projects that engage teens both on and offline. We strongly believe that through utilizing these media in contextualized and reflective situations learners can gain the skills that will allow them to thrive in the 21st century.

For the past seven years, Global Kids has experimented with a variety of media including online

dialogues, casual online games, social networks and blogs. In each of these tools we often found the ability to mirror youth development approaches that we'd been using to engage young people in face-to-face classroom settings for over a decade. Online dialogues allowed serious debate to happen. Games provided for highly engaging interactive activities that could deal with real issues. Blogs gave young people a platform to make their voices heard, as well as a space to be reflective. But when we came across the virtual world of Second Life (SL), we immediately knew that an extremely powerful tool for educating young people about media had been discovered.

Second Life is a three dimensional multiplayer online environment in which participants control an avatar, or virtual representation of themselves, and move through and interact with other people, known as residents. At first glance, a casual observer can easily mistake Second Life for a video game; there is a first person perspective popular in many action games, and a person using it often juggles many tasks and windows, something not uncommon in popular massively multiplayer online role playing games (MMORPG's).

But Second Life is clearly not a game. For one, there is no end state, or "winning". There is no goal, which is one of the things that makes it feel, well, like life. The second and arguably most dynamic characteristic of Second Life is the fact that everything in the virtual world is created by its users, rather than by the company, Linden Lab, that developed the platform. Because the residents retain intellectual property rights over everything they create in-world, Second Life is an inherently creative and entrepreneurial environment, with the users literally building all the aspects and experiences of the

world around them. Residents can design interactive art galleries, see live music performances, hold synchronous debates, even going skydiving.

At Global Kids, we've taken advantage of Second Life's open-ended and flexible nature in numerous contexts in our work with youth. In face-to-face after-school programs, we've worked with youth to create both animated films and video games about important global issues using Second Life as a media creation tool. Sets and costumes were built in-world, screen capture tools were used for filming, immersive gaming environments were created and programmed, all within a virtual landscape.

We've also utilized Second Life as a distance education tool. For the past two summers, we've worked with youth in-world to hold summer camps. For a couple of hours each days these youth engaged in interactive workshops about issues like global economic inequality, child rights, war and genocide. The teens then created projects related to issues most important to them.

Through all of these programs, youth we work with have the opportunity to develop high-level critical thinking skills, as well as the ability to reflect upon and create media in a wholly different way than has ever been possible. As a youth development organization, we found this medium to be particularly powerful. Its constitution naturally lends itself to youth leadership, skill stratification and resulting collaborative teams and overall youth empowerment.

In the course of the two years that we've used this virtual world to conduct educational projects, we've been documenting and reflecting upon what was learned about virtual education and es-



pecially best practices for educators looking to use this environment.

The pages that follow contain two sections, prepared by all of Global Kids staff working within Second Life. One shares practices on working within the Second Life community and how to leverage the strengths of this environment for distance education. The other describes best practices for using Second Life as a face-to-face educational and media creation tool. And while much of our language is oriented around educating teens, many of these principles and techniques apply across different student populations.

It's our hope that these practices can not only be a guide on how to implement successful educational programming using virtual environments for those who are interested in doing so, but also provide a view into the possibilities of this type of medium for those that have never imagined its use for education.



GLOBALLY CONNECTED: BEST PRACTICES FOR DISTANCE EDUCATION IN SECOND LIFE

Within Second Life, it's wholly possible to engage students in substantive educational programs without ever seeing them. In Teen Second Life, there is an active community of thousands of teens aged 13-17, likely the largest youth only community and economy in the world. As an educator, you're able to enter this space after a criminal background check but are restricted to the adult owned land associated with your given project. If you're conducting a program in the adult area of Second Life, your potential young adult or adult student base is in the millions. Regardless, once you're in Second Life, there are plenty of new challenges to keep in mind. Use the tips below to make the best of this distance-learning context.

1. Create Multiple Places of Meaning

In the real world, a Global Kids program always meets in the same classroom and the setting does

not vary. A workshop in Second Life can start in the GK Clubhouse, move to the factory, shift to the cloud platform, transfer to the dance club, then conclude at the campfire. Each location can be associated with different types of activities, norms and behaviors. For example, everyone knows to start at the GK Clubhouse, expect interactive activities in the factory, have fun at the dance club and that processing and closure will occur around the campfire. There are different ways of acting expected in each setting. Establishing the association between each modality and a specific location allows it location to be used as embodied shorthand to create the desired mode of interacting.

2. If You Build It, They Will Come

Knowing an audience is waiting can add motivation for students. Leverage the larger SL/TSL community as an audience for a program in which the students develop a final project. Create a game. Host a teach-in. Then let students recruit and publicize. Having them become networked and active in the SL/TSL community builds further skills and adds a sense of anticipation around a project.

3. Go Beyond Second Life

Leverage existing Internet content and tools. Even if the facilitators are in a different room than the participants, they can still run the program as if they were in a computer lab. Create a web-based scavenger hunt, with teams organized through Skype or by SL's voice capabilities. Direct students to relevant multimedia or a socially-conscious game. It will increase engagement and can be critical in developing curriculum around media literacy by pointing to the most accessible media environment in existence.

4. Ensure the Program is Designed for the Recruited Participants

Are the participants seasoned veterans or new to SL? Are they in the same time zone or scattered throughout the world? Do they have the technology required for the planned activities? Do the students, as a collective, contain all of the skills required by the curriculum and, if so, does the curriculum take into account methods for creating “cross-functional teams,” in which individuals pool their strengths towards a common goal? Are the activities and facilitation tools designed to account for the diversity of participants’ backgrounds, learning styles, and age/development?

5. Build, Build, Build!

Create as many opportunities as possible for students to express themselves through building. SL

is all about building so it is almost hard NOT to do this. If they’re capable, encourage them to build the facilities and material required for the program (the meeting rooms, the workshop materials, t-shirts for the program, etc.). Building items that they can use creates a sense of ownership, which increases retention. (Have a professional team hired to build the necessities, in case students fall short of their commitments). Incorporate building into the activities themselves (e.g. build and act out a scene in a life-size diorama, create a billboard about injustice). Create weekly projects that culminate in some form of public build. Use the weekly projects to model movement towards a project culminating build. Use these builds as a way for the teens to centralize and demonstrate what they are learning. Don’t just build from scratch – modify or “mod” existing content, both within Second Life or from the web (e.g. open-sourced images from Flickr or clothing designs).





6. Don't Just Build; Design and Manipulate Avatars

In Second Life, your abilities to control appearance are limitless. Take advantage of this and create opportunities for identity play and self expression through avatar creation and manipulation. This can be used to generate empathy, by putting the people in the shoes of another. It can be used for theatrical purposes, to enact a skit about an issue. It encourages creativity and creates great photo opportunities. Explore existing avatar choices to bring up issues of gender and racial representation; use non-human avatars to address issues of discrimination.

7. Think Globally, Act Locally

While students can potentially be scattered across the globe, they can experience SL/TSL as their

shared community. Turn educating and inspiring that larger community into a project goal. Making a difference will add motivation for participants. Strategizing approaches for effective education and advocacy will challenge the students to think creatively and critically. It will appeal to their desire to have their voice heard and to make a difference. It will develop their leadership abilities. The advocacy projects can leverage existing, online actions; why rebuild the wheel? Finally, it means the programmatic impact moves outside the scope of just the participants to a larger community.

8. Know When Students Know Best

The students, especially if they're teens, will often know more in certain areas than any adult will about SL or TSL and how the program can best be run. In TSL, depending on program design, the teens can leave the private island and participate in the forums. They hold greater social capital and wider networks. They know expectations, observe norms, and hold extensive local knowledge within the teen grid. Keep a flexible mind when designing curriculum and be ready to take the lead from participants to change it. Hire a SL/TSL native as an intern. Ask them what resources exist that can be utilized, from across the wider virtual world the program is situated in. Build regular student feedback into the program (before, during and after activities), use various channels to solicit that feedback, and reflect this feedback through visible changes in the program.

9. Support Emerging Leadership

Create opportunities for leadership and support it. Empower students to be group or land managers. Speak on in-world panels about their experiences in Second Life. Meet regularly as a group

to offer support and process their experiences. Have them: Facilitate workshops. Give tours. Run movie screenings. Take photos. Host parties. Report on blogs, Moderate events. Promote events. Create tools. Design spaces. Create contests. Make surveys. Create groups. Ask how you can support their leadership.

AN IN-CLASS POWERHOUSE: BEST PRACTICES IN USING SECOND LIFE FOR FACE-TO-FACE EDUCATION

Second Life, while being a versatile communications tool that brings together people from around the world, is also a dynamic media creation platform. The ability to create films, interactive exhibits and video games, to name a few, makes a strong argument for its usage in media literacy courses. After a year of conducting multiple face-to-face after-school programs utilizing Second Life, there were many lessons that we learned, and we've shared a number of them below.

1. Collaboration and Cross-Functional Teams

One of the strengths of a virtual world is the ability to collaborate. A sandbox is always a popular place in Second Life, where residents often hang out and simply play by building things together. A solitary educational task in Second Life can be turned from dull to exciting when done by a team. For example, to teach teens how to build basic objects and bring images into Second Life, we pair teams with words, such as "peace" or "justice," send them to the web to find images that depict either their presence or absence, then train them to create billboards in-world to show off their finds. Cross-functional teams, one form of collabora-

tion encouraged by virtual worlds, was described by James Paul Gee as collaborations in which:

...players form teams in which each player contributes a different set of skills. Each player must master a specialty... but the players must understand each other's specializations well enough to coordinate with one another. Thus, the knowledge needed to play the games is distributed among a set of real people and their smart tools, much as in a modern science lab or high-tech workplace.

When we make machinima in our after school program, everyone plays a different role. Some teens focus on the film making skills, such as directing, or acting, or filming. Other focus on the Second Life aspects, creating sets, or costumes, or avatars. No one teen can do it all, but together they have all the skills they need, and more, to pull it off.

2. Playground Versus Workplace

To many, a classroom that felt like a playground would be viewed as a failure. In Second Life, however,



especially in the teen grid, it is the norm. SL is already a game-like environment, where residents cannot help but play with concepts of self representation, with alternative physics, and more. But the workplace of the educator, who may be on a schedule with serious content to address, need not be in conflict with the playspace of the learner, who wants to have fun and bring a creative dynamic to their interactions. Educational programs work best in Second Life that can strike a balance, live in the space where the line between the two is impossibly blurred, and roll with the unexpected consequences.

In one week in the Fall of 2006, Global Kids brought two sets of after school youth into Second Life, each for the first time. One was a group using Second Life to make serious games. They entered on a Monday. The second was a group using Second Life to make machinima, animated film produced using a video game engine. They entered on a

Tuesday. That Tuesday evening, back at home, after dinner, one of us logged into Second Life to do some work. Standing there were two students from one program and a third from another. The youth were from all over New York City, yet unlikely to ever meet in person. Yet there they were in Second Life, meeting one another, and now patiently waiting for the GK staff member to appear as well. Before long a dozen teens had logged in, not just from these two programs but from our summer camp as well. They all hung out and chatted. The campers offered to take the new residents on a tour of the grid while other youth from the two after school programs went to the closest sandbox to practice building together. Most students do not want to return to school after escaping for the day; these teens, however, could not wait to get back.

3. Social Networking

Second Life is not only a graphically rich 3D building environment. It is also an emerging social network, similar to others like Facebook and MySpace, in which individuals connect with other individuals, forming networks of connections which interconnect with other networks of connections. There are many tools in Second Life for participating in the emerging social network: join or create a group, send an IM to a group to get help from those logged in, send and receive group notices, add people to your friends list and more. These tools can be used to publicize events, to locate advice or help, or, as Henry Jenkins details in *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*, educate teens about how to effectively use these networks:

Learning in a networked society involves understanding how networks work and how to deploy them for one's own ends. It involves understanding the social and cultural contexts within which different information emerges, when to trust and when not to trust others, to filter and prioritize relevant data, and how to



use networks to get one's own work out into the world and in front of a relevant and, with hope, appreciative public.

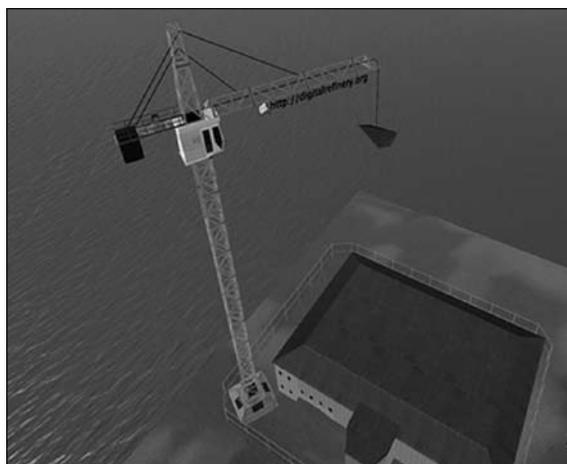
We always make sure our teens join relevant groups once they enter Second Life. Rather than answer their questions, such as "I need to film on a racetrack — where can I find one?" or "How can I make a car," we ask them to send a group IM. Someone is bound to be online who can help and they need to learn how to access and assess the resource within their social networks. This turns what may look like an isolated teen alone at a computer into one awash in rich and varied social connections.

4. Teacher Becomes Facilitator, Student Becomes Peer Mentor

You do not need to know something in Second Life in order to teach it — you just need to know how to connect your students with people who do. As a social network, information and people are ever-present and fluid; educators who can navigate these networks and train their students to do the same need not rely on being the expert importing knowledge but become facilitators connecting students and information.

As teachers become facilitators, and teens specialize and their skills stratify, learners are able to teach one another, not necessarily in a formal manner but informally, when required. Rather than isolate learners from one another, or discourage side conversations, the interactions between students can be where some of the best learning takes place, for all involved.

During our after school gaming program, two GK Trainers worked with fifteen teens. Each teen picked one thing they wanted to learn. Not only would it have been impossible for the two trainers to simultaneously teach fifteen different Second Life skills, but most of the skills were beyond the



modest abilities of these trainers: building a car, designing clothing, etc. But by the end of the day each teen said they learned the skill they wanted to know. How? After gathering a list of the desired skills, the GK trainers sent a group IM to the Global Kids' group with the list and a request for help. Within ten minutes all of the after school teens were paired with one or two teens in-world and were learning their desired skills. When an in-world helper was not up to speed, a new request was sent to the group and a new volunteer was recruited. This would have been a nightmare to coordinate in advance; it relied on the ability to reach out in the moment to those currently online, relying on the fact that help is usually available. So rather than teach the SL skills, the GK trainers set-up the relationships, wandered the room making sure the students were getting the support they required, and processed it together afterwards as a group.

5. Scale Projects to Fit Resources

Not all programs meet for the same period of time. Not all programs have teens with strong digital literacy skills, nor teens who can spend time in Second Life outside the program. As Second Life creates opportunities to literally build your dreams, it is easy to overreach. Just because it CAN be done in Second Life does not mean you and your program can be the ones to do it.

In our first year bringing our after school gaming program into Second Life, we made one project scaling mistake after another. First we presumed we could teach the participants sophisticated skills like coding, even though they only met with us once a week, on substandard computers, and had little access to Second Life outside our program. We then turned for help to an after school program we were teaching remotely in Washington, D.C., at a technology high school. The computers were excellent and the teens had strong digital literacy. However, they too had little access outside the program and, though meeting twice a week, the program ran half as long as it needed to. Luckily, we found a third group of teens, self-organized in Second Life with endless time in-world and high-end SL skills, with which to collaborate and complete the project. Had we designed a more modest final project for our after school gaming program we would not have run over schedule nor been desperate to add one group of teen resources after another.

6. Situate Second Life within a Larger Internet Ecology

No virtual world is an island (even if you can rent one in Second Life). Leverage the greater Web 2.0 world – in which participants create and share

content – to take full advantage of the ability to bring content in to, and take it out of, SL. The whole is great than its parts. This also allows the use of Second Life as a tool for producing youth media and distributing it to a broader audience.

In its first few weeks, over a thousand people on YouTube.com watched the machinima made in our after school program. Teen reporters write articles about our programs on our blog, HolyMeatballs.org, and post photos uploaded to our account on Flickr.com. They debate issues on public forums like MacArthur's Spotlight on Digital Media and Learning blog. They use images.google.com and Wikipedia.com to research photos and information for workshops. Second Life may play a central role in these programs, but incorporating these other tools enhances what a virtual world can offer.

7. Leverage In-world Resources

Don't rebuild the wheel. Leverage existing in-world resources, both people and tools, to strengthen your programs. Use the SL listservs to find people and tools that people recommend. Shop in Second Life and on the web-based stores to find the tools you need. Use your social networks to find the people who can help. And if you cannot find the tool you need, build it yourself!

For displaying photos and text, we often use a free white-board. It is a board that you can pre-load with images (composed of pictures or text) which can be clicked-through to display. When we needed to curate games made by teens on our new serious gaming island, we found a teen volunteer to manage the project. Volunteers are easy to come by in SL; there are always people looking for something to do, especially things that will make them feel like they are making a difference. The teen managing our island then co-taught two sessions of our after school gaming programs, using Skype and Second Life to give the





teens in Brooklyn, New York a tour of game genres in TSL, all from the comfort of his British living room.

8. When Technology Fails, Know When To Move On

Technology has this funny thing about not working when you least expect it. Don't throw in the towel at first blush, but also know when to move on. Be flexible with the program and have a back-up handy just in case. When possible, test everything in advance. Is a new version of the Second Life software required? Did that item that worked when one person was using it work when 15 students had a simultaneous go at it?

We were so excited to give the teens in our after school machinima program a sophisticated tool for filming. These virtual cameras allow the user to establish a path and then sit on a chair that will trace it as he or she films. However, no one had brought this camera over from the main grid to the teen grid before. Certain features only worked for adults, and not teens. As we had not tested it on teens in advance, we learned the hard way, wasting precious program time trying to figure out why it did not function properly. As we tried to debug it over the next few weeks, we continually entered the program convinced it would now work only to learn, to our disappointment, that something new was in the way. Resolving that the program was a bad

place to debug the camera, we eventually decided to move on, perhaps a few sessions too late. (A few months later, after it was all fixed, we re-introduced it to the program to great success).

9. Recognize and Support Skill Stratification

Learners will develop skills in different orders and at different rates. Some will be fascinated with their avatar, learning sophisticated ways to modify their shape or create clothing. Some will be drawn to build increasingly more sophisticated objects. Others will make friend after friend and learn how to manage the social network. Rather than be a liability, this can be a strength. Support the leadership skills of those early adapters who develop certain skills, encouraging them to help others and make that role visible.

*In our after school machinima program, six sessions in Second Life had barely passed before one GK trainer overheard one GK youth leader tell another, when having difficulty in Second Life, to "Ask Joe." Not the GK trainer, an expert in Second Life, but Joe, a teenager, who had emerged as the first peer resource. For weeks after, rather than answer certain questions, the GK trainers would defer to Joe for an answer and, at times, ask him to first learn a skill and then teach the others. This initiated a year of the youth looking to one another for guidance as different teens specialized and excelled at different skills. **

To learn more about the work that informs this report, please visit our blog at HOLYMEATBALLS.ORG.