



By Maureen Brown Yoder

Walk, Fly, or Teleport to Learning

Virtual Worlds in the Classroom

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According to eMarketer estimates, by 2011, 20 million children will be members of Internet-based multiuser virtual environments (MUEs), up from the 8.2 million who are already participating in them today. “Get ready for total inundation,” warns Debra Aho Williamson, an analyst at the research firm eMarketer.

For educators looking for new ways to engage their students, MUEs offer a great opportunity for creative teaching and learning. In addition to content-rich explorations, students in a virtual environment learn social, technical, and practical life skills in a setting that keeps them engaged, inquisitive, and playful. The platform also makes possible international collaboration and ambitious goals, such as dealing with human rights issues and improving the global environment.

If you’ve never participated in a virtual environment before, this all may sound intimidating. There is a learning curve, but it’s worth it. I know from personal experience. Up until two years ago, I had never set one digital foot in a virtual environment. At the time, I wasn’t a big proponent of video games, which I considered entertaining but only marginally educational. My image of virtual worlds was as futuristic, ominous environments designed for adults.

All that changed when I learned about Second Life resources for educators and the safe, educationally oriented islands on the Second Life Teen Grid. I tentatively put aside my skepticism and designed my virtual alter ego. Before I knew it, my awkward avatar was stumbling onto learning opportunities that I never thought possible and discovering constructivist teaching and experiential learning within virtual wonderlands that would have inspired even Alice.

Major MUEs

MUEs come in a wide variety of iterations, from realistic-looking cities to imaginative fantasy lands. Some MUEs, such as Second Life, are public and meant for adults. Such environments require residents to download software, create a username and password, and design a cartoon-like identity called an avatar that can walk, fly, or teleport to sites where they can socialize, shop, play games, and learn. Amid the array of entertainment-oriented islands in Second Life, a growing number of high-quality educational islands provide teachers with a place to share resources and learn new skills. One island where *L&L* readers will feel welcome is ISTE Island, which features ed tech-related networking events and speaker series as well as virtual NECC sessions.

Linden Lab, the company that runs Second Life, also created a teen grid that’s open only to 13- to 17-year-olds and their teachers (background checks are required). The educational projects in this MUE fall into two categories: public projects that are accessible to all residents of Teen Second Life, and private projects that are accessible only to teens invited by their teachers or school systems.

Educators or school systems can enter Teen Second Life to purchase land at a cost that is lower than the adult Second Life grid. On the teen grid land, teachers and students have developed virtual environments that include campuses, amphitheaters, cities, and inventive, otherworldly settings. Linden Lab also offers Campus: TSL, which provides short-term agreements for free virtual land to middle school and secondary educators.

Global Kids

One of the most successful efforts to engage students in virtual worlds is Global Kids, an organization whose mission is “to educate and inspire urban youth to become successful

students and global and community leaders by engaging them in socially dynamic, content-rich learning experiences.” Global Kids has a variety of projects that engage students in worthy efforts to promote global understanding.

“Virtual worlds can provide an assortment of learning opportunities, from identity formation to social networking, entrepreneurial skills, and financial literacy,” says Barry Joseph, director of Global Kids’ Online Leadership Program. “Global Kids has responded by developing programs that formalize this informal learning to support youth leadership development around social and global issues.”

Virtual Aid

Global Kids partners with GamePill, a company that designs highly interactive digital experiences, to create socially conscious games that are engaging, timely, and educational. You can find one such game at the website Hurricane Katrina: Tempest in Crescent City, which lets each player take on the identity of a child traveling across New Orleans in search of her mother. Along the way, players have the opportunity to talk to citizens and earn “hero” points by helping people who are injured and trapped in the floods.

Ayiti: The Cost of Life focuses on a developing country and the challenges children there might face in their efforts to get an education. Students help the Guinard family “struggle to make ends meet and get ahead in their poverty-stricken homeland, Haiti.” They must make decisions related to work, education, community building, personal purchases, and health care, all within an entertaining game format. The goal is to keep the family healthy, happy, and educated. Students can play the game over and over again as they become more skilled and experienced at assessing the economics of the family’s situation.



Take Your First Virtual Steps

Kids' participation in virtual environments has grown exponentially in the last few years. As educators, we need to understand how our students interact and learn within them. To truly understand the experience, we need to address the uncertainties we might have, create our own virtual presences, and experience MUVEs firsthand. We must accept that our students have grown up primed to participate and achieve in worlds we have not even imagined. As their teachers, we need to create opportunities for our students and assemble the resources they will need in the future. Fortunately, along the way, our lives as educators will be enriched in unexpected ways, and the expression "spread your wings" will take on a whole new meaning.

Here's how to get started:

Read, research, learn.

- Search FYI (on page 19) and the Resources list at the end of this article (on page 20) for examples that relate to your specific subject area and grade level.
- Read blogs about other people's experiences in virtual worlds.

Connect with like minds.

- Find out if other teachers in your school, district, or state are involved in MUVEs.
- Ask friends and colleagues with similar interests who participate in virtual worlds to take you on a tour with their avatars.

Create your virtual self and explore.

- Become a resident of a virtual world, such as Second Life.
- If possible, find someone to sit with who has experience with it.
- Download the software, sign on, and create your own avatar.
- Go through tutorials, take tours, and gather resources and helpful hints.
- Teleport to and explore educationally oriented islands, such as ISTE Island.
- Chat with other avatars, and don't be shy about asking questions.

Ayiti, which won the Games for Change GaCha Award for Best Awareness-Raising Game, has been played more than 2 million times and is currently being translated into Chinese. It's a perfect example of how virtual worlds can get young people interested in and active in global issues.

In the summer of 2008, teenagers in New York and Chicago participated in a MacArthur Foundation-funded intensive camp called I Dig Tanzania that taught them about Tanzania's culture, politics, and scientific research while they explored Second Life. Students drove their virtual jeeps through Virtual Tanzania and saw animated lions, giraffes, elephants, and hippos. They spoke with the international research team in Tanzania via Skype and debated the topic of ecotourism at Serengeti and Mount Kilimanjaro. Then they discussed paleontology and planned a fossil dig—and that was just the first day!

Making a Difference in Real Life

What's great about the Global Kids projects is that they mix virtual-world technologies with real-world challenges, engaging young students in socially responsible efforts that can have a real impact on the world they live in at the same time that they improve their chances for a promising future.

"We have to think of ways to use games not just to escape reality but to re-engage with reality," writes MIT professor Henry Jenkins. "[Global Kids is] talking about real things that touch real people."

The organization's most recent project, which involves after-school programs as well as individual students, is the Dream It. Do it. Initiative (DIDI), a Second Life partnership with Ashoka's Youth Venture. Youth Venture, whose slogan is "Everyone a changemaker," aims to teach young people how to lead social change and make an impact on their environment while gaining skills and the innate

understanding that they can be powerful now and into their adult futures. DIDI's specific goal is to improve health and health care through social entrepreneurship.

Once in the virtual world of Teen Second Life, students can teleport to the DIDI Initiative Island and register for a workshop to explore possibilities, identify community issues, and develop action plans to address social and health issues relating to poverty, food shortages, discrimination, poor housing, and vulnerable populations. The program allows teens to become social entrepreneurs while working in teams to solve real-life problems. DIDI even awards particularly worthwhile projects \$1,000 in seed money to make the team's plans a reality. DIDI also provides students with technical assistance and ongoing support in the

3 Ways to Start a Classroom MUVE

- 1 Join an established group.** Many commercial and private MUVEs welcome newcomers.
- 2 Share with others.** Existing educational sites sometimes offer space to borrow or rent. Go to ISTE Island (<http://slurl.com/secondlife/ISTE%20Island/93/83/30>) or Lighthouse Learning Island (<http://nausetschools.org/lighthouselearning>).
- 3 Build your own.** This may be the most ambitious option, but it will provide the most flexibility. You may have to purchase virtual real estate, and you and your students will need to build the environment. Second Life has numerous online workshops and self-paced tutorials about how to build items for a Second Life island, and many Second Life virtual shops sell everything from premade trees to paintings for the walls of your virtual home.

There is also a growing number of people for hire who will build your virtual environment for you. Find out how to hire a contractor by going to the SL-education blog or by searching for *Second Life contractor*.

form of additional workshops, office hours, and how-to booklets.

One of DIDI's most impressive accomplishments was working with 16- to 17-year-old males who participated from a juvenile detention center. Though their world was limited by their incarceration, their ability to learn within a virtual environment opened up opportunities for collaboration and gaining awareness of world problems, which would have been impossible in the brick-and-mortar world.

"The Dream It. Do It. Initiative allows young people around the world to not only identify collective issues in their societies that they care about, but to also think deeply about ways in which they can harness their own interests in a way that catalyzes positive change," explains Amira Fouad, a program manager with Global Kids' Online Leadership Program. "They learn very quickly that they are capable, empowered citizens now and can make a very real difference in the communities they are a part of."

Science through Second Life

Another Global Kids project, the Science through Second Life (StSL) class at the High School for Global Citizenship in New York City, was very popular with students, according to Elizabeth Wellman, a science consultant for Global Kids. This high school freshman interdisciplinary life and physical science curriculum blended classroom activities with activities on the Teen Grid of Second Life. Students entered the virtual world every day to learn about science from a global perspective. They studied sustainable building and energy alternatives, such as photovoltaic solar cells, hybrid cars, and energy conservation techniques, then presented their findings with interactive Second Life demonstrations and billboards.

Students could not get enough of this class. After the school day

ended, many continued to participate, sometimes late into the evening. One student logged in each day to participate despite having been suspended. Another student wrote, "I always thought, 'I can't do this,' but now I have learned so much, like about sustainability and how I can help to make our earth better. I never knew I was this smart."

"Our student scientists never take a break!" wrote one teacher about her students' work on the Teen Grid. "Recently they have been spotted exploring a coal mine, measuring levels of water pollution, interviewing researchers, investigating the effects of oil spills, and taking samples of arctic greenhouse gases."

Preliminary analysis of the outcomes shows that the StSL students have an increased interest in science and a new appreciation of the importance of science in real life. They also need less advanced preparation, as they are good at learning as they go and with "just in time" skill building.

The adaptability of the StSL curriculum was critical to its success, as teachers could tailor activities to the needs of advanced students as well as to those of low-performing students. The open-endedness of the virtual world promoted creativity in students' expression of their interests and identities.

Help for Educators

In my opinion, Global Kids' greatest contribution to educators so far is ReZed, the Hub for Learning and Virtual Worlds, which is funded by the Humanities, Arts, Science, and Technology Advanced Collaboratory (HASTAC) for the MacArthur Foundation. Whether you are new to MUEs, want to learn more about how you can use them in your classrooms, or wish to discuss related issues with other teachers, you can find what you are looking for at this comprehensive, ever evolving website.

FYI

Need more background? Here are a few more links to help you make the leap into using MUEs in your classroom:

DIDI blog: www.holymeatballs.org/second_life/didi_initiative

eSchool News article about the Dream It Do It Initiative: www.eschoolnews.com/news/top-news/news-by-subject/community/index.cfm?i>=54719

Global Kids blog: <http://olp.globalkids.org>

Global Kids Twitter feed: www.Twitter.com/Holymeatballs

I Dig Tanzania blog: www.holymeatballs.org/second_life/i_dig_tanzania/

Interview with the Science in Second Life teacher: www.rezed.org/page/page/show?id=2047896%3APage%3A10671

Teens' comments about the Science through Second Life class: www.holymeatballs.org/2008/06/sisl_teens_comment_on_their_si.html#more

One of its best resources is the Global Kids' Second Life Curriculum, a nine-level curriculum with modules that include 163 "missions." Teachers can use all of the activities, which were planned and implemented by experienced virtual-world designers, for free.

Global Kids also offers consulting and professional development opportunities to assist teachers who are interested in developing online games to promote "global awareness, engaged citizenship, and 21st-century skills."

And don't forget ISTE Island, which extends ISTE's support for educators into the virtual world with an in-world group, weekly networking socials and topical events, and the ISTE Eduverse Talks television series.

If you have been skeptical about virtual worlds, it might take some courage to explore a radically different approach to teaching that will be unfamiliar and possibly frightening at first. But many educators find that it is worth the effort because the educational opportunities available through MUEs are enriching their classrooms in new and previously unimagined



Teen Second Life is open only to users between ages 13 and 17 and their teachers.



Hurricane Katrina: Tempest in Crescent City players navigate New Orleans during the historic storm while helping citizens who are injured and trapped in the floods.

ways. By facilitating virtual world projects, you would prepare your students to interact and collaborate in a setting that will be increasingly available and attractive to them. When the projects your students get involved in have international implications, they will get to experience the excitement of making an impact that reaches far beyond their classroom. And as their teacher, you will get to play a central role in paving a new path to their future.

Resources

- Ayiti: The Cost of Life: <http://costoflife.ning.com>
- Dream It. Do It. Initiative in Second Life: <http://www.globalkids.org/?id=101>
- Global Kids Second Life Curriculum: www.rezed.org/group/GKslcurriculum
- Hurricane Katrina: Tempest in Crescent City: www.tempestincrescentcity.org
- I Dig Tanzania overview: www.holymeatballs.org/2008/07/idt_overview_of_i_dig_tanzania.html
- ISTE Island in Second Life: www.iste.org/Content/NavigationMenu/Membership/Member_Networking/ISTE_Second_Life.htm
- Second Life: www.secondlife.com
- Second Life education blog: <http://www.sl-educationblog.org>



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