

## Virtual Worlds: Moving Beyond Today

*The following excerpt is based on an interview conducted by Gerry Bayne, EDUCAUSE multimedia producer, at the EDUCAUSE Midwest Regional Conference held in Chicago, Illinois, in March 2008. To listen to the full podcast, go to <<http://connect.educause.edu/blog/gbayne/educausenowshow7virtualwo/47069>>.*

**Bayne:** Much like the brand names Kleenex and Xerox, Second Life seems to be the only virtual world people talk about. What else is out there?

**Welch:** I divide virtual worlds into four quadrants. Along one axis are “general purpose” and “specific function.” Along the other axis are “private use” and “public use.” Second Life and Active Worlds, for example, are public-access, general-purpose. The designers don’t know what you’re going to do in there, and they don’t really care. They want you to be creative. In the opposite quadrant are virtual worlds such as military simulations. They’re closed, and they have a specific purpose—for example, flying an aircraft or going into an urban area. The only people involved are the people the designers want to be involved.

In one of the remaining quadrants are examples such as Battlefield and World of Warcraft. These are public-access but used for a specific function: to play the game. They’re not designed for users to do anything outside the parameters of that game. And then there are virtual worlds, such as those provided by Forterra Systems, that are general-purpose but private. So an institution would have that world to itself, with only student and faculty access, and it could control the behaviors and things that go on in that world.

**Bayne:** Can you talk about virtual worlds that might be effective in higher education?

**Welch:** What I think we are missing now are worlds that are focused specifically on higher education. I think we will get there at some point. How fast we will get there, I don’t know, but a lot of that will be based on the decisions we make now.

As an example, a virtual world could be designed to teach organic chemistry at the molecular level or to very accurately represent physics. That would be a very different virtual world from one that would teach about procedures in court cases or about economics and group versus individual behavior.

There are also games that can simulate events in history. When I was a professor at West Point, one of our history professors taught about the Battle of Gettysburg by using a war game. He changed a few parameters here and there so that students really understood how important the defense at Little Round Top was to the Union forces and what might have happened if Pickett’s Charge had succeeded. Students got to see the what-ifs and were able to realize the ramifications of some of the decisions that people made at the time—which is of course what the professor was trying to get across. He did so, much more effectively than writing it on a blackboard.

**Bayne:** Why isn’t Second Life an all-purpose solution?

**Welch:** Like a Swiss Army knife, Second Life has a lot of tools that can do a lot of things. But none of the tools are going to

be optimized for a specific task. Second Life, which is general-purpose, has to work across the Internet to all different kinds of computers and hardware. It would be very difficult to try to teach certain subjects using that kind of a tool. Also, Second Life (Linden Lab) is clearly a for-profit company. It has to make money and so needs to appeal to and entertain a lot of people. Right now, Second Life does not have a model that allows it to be more fine-grained and focused.

**Bayne:** Why is a virtual world important for an institution of higher education?

**Welch:** Let me talk about the life cycle of technology, having lived through it a few times. We usually start off with a new educational technology, and early adopters go out and endure a lot of pain to do what we’re already doing—in some cases not as well, but eventually as well—with the new technology. Through their work, we then figure out how to do things that we never could do before.

I was at an EDUCAUSE presentation last fall. At the end of the session, somebody stood up and asked the presenter, who was all jazzed about the work he was doing in Second Life: “What are you doing in Second Life that you can’t do with our normal distance-learning tools?” There was the typical tap-dancing and so forth, but really the answer was, “Nothing.” And that’s where we are right now. For instance, you can go in a virtual world and look at the roof of the Sistine Chapel, and you can fly your avatar up to look at it. But we can see very good digital representations of the Sistine Chapel online as well, from multiple points of view

and so forth, without using Second Life or a virtual world.

Back in the mid-1990s, every professor who was technology-oriented had his or her own course web page, usually on a public website. Basically, my first web page was my class syllabus: I just didn't have to print it out, and when I made changes, I didn't have to hand out an additional piece of paper. This was really the same thing that I was already doing. But now, with the course-management systems that have evolved, we're doing things that we couldn't do before.

do before. I think the key is the *potential* of virtual worlds. There are things that we've yet to discover, where we will go beyond what we currently can do.

I was at dinner last night, and we were talking about the question, "How long have we known that the way that we teach is really not the best way?" The answer is probably thirty to forty years. But we keep doing it. Maybe soon we will take a step further, set up a virtual environment, and let students explore it, allowing the teacher to become more the mentor or the guide than the broadcaster.

there is a chance for inappropriate behavior, for certain things to happen. In an educational environment, we're used to having some kind of control, but we're probably not used to thinking about how we translate a safe physical campus into a safe virtual campus or virtual learning environment.

Second, the real key is going to be the content. This content includes the virtual objects, their behaviors, the pedagogy around it—the whole thing. These compelling virtual learning environments are going to be developed. But they are not easy to develop, and it's going to take a lot of time. The process may be an open source model, in which the educational community contributes, or it may be a commercial model, in which the institution buys or subscribes to a service. I don't know. But if an institution invests a lot of resources one way or another and makes the wrong choice, it will be left with inferior content and will have wasted its resources.

As one of the great chess masters said at the beginning of a chess game: "The mistakes are all there waiting to be made." As professors are getting involved and starting to formulate policies and maybe look at strategic investments, institutions need to try to figure out what the second- and third-order effects will be of the moves they make now. They need to think and move beyond today.



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Virtual worlds offer an interface that's exciting to students, and capturing students' excitement is important. Students want to interact in this kind of environment, socializing and accomplishing goals. So that's good. We get their attention. Although we basically do the same things we would do otherwise, I think that through this work, we're going to figure out how to do things that we couldn't

**Bayne:** What sort of advice would you give higher education institutions regarding virtual worlds?

**Welch:** Institutions need to start thinking about virtual worlds now, because the decisions to be made could have far-reaching effects.

First, as administrators, we all want to avoid disasters. In using a public space,



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