

# **Establishing Virtual Learning Worlds**

## **The Impact of Virtual Worlds and Online Gaming on Education and Training**

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It is probably safe to say that gaming, whether it be via consoles or computers, complex games or simple games, has moved from a cultural phenomenon enjoyed by a small fraction to a mainstream leisure activity and medium of entertainment. A lot of publicity has pointed to the fact that in 2002, the gaming industry generated more net profits than Hollywood. This is only somewhat true. The gaming industry did in fact bring in more revenue than movies at the box office, but when taking things like rentals and secondary screenings, the movie industry is still significantly larger than the gaming industry. But the gaming industry is still growing rapidly, approximately 3x as fast as the movie industry. One of the reasons for the game market expanding is the proliferation of Online games, Massively Multiplayer Online Role Playing Games (MMORPGs) and various other types of virtual worlds (Second Life, Sims Online, There).

In the United States and Europe alone, MMORPGs bring in approximately \$200,000,000 annually, with a secondary market of approximately \$40-50,000,000. Asia is believed to have an even larger Online gaming community, so a realistic prediction would point to Online games bringing in close to \$400,000,000 annually around the globe. This is only MMORPGs. Virtual Worlds (VWs) like There and Second Life are just getting off the ground, and could become significant revenue generators. Many gaming professionals have forecasted online gaming (whether it be through a console or computer) to become the number one form of gaming in the future. More and more people are getting involved with online gaming now that consoles (Xbox, PS2) are coming pre-packaged with network adapters for broadband gameplay. Companies like Electronic Arts and Microsoft are investing millions of dollars on large network infrastructures to support online gaming networks, banking on the fact that online game play is the future of gaming.

Online gaming continues to gain momentum and popularity, as each game or VW is released. So why is it that at this moment in time when online gaming is growing exponentially that online learning appears to be dwindling? With the inception of elearning, organizations and education envisioned a learning revolution. People could now be trained at their desktops, anytime, anywhere, in a very effective manner. Just in time learning was going to be the way of the future, and elearning was going to enable this.

So where are we now? Elearning is still around, but the buzz that it once held is long gone. Ask employees and students about their experiences in elearning, and you will probably get very mixed reactions, many of them negative. With a few exceptions, most elearning is very poorly designed. Developers attempt to utilize 'antique' instructional design methodologies that are designed (and worked well) for instructor led, face-to-face training and education. When porting these methodologies to elearning, they tend to fall apart. Elearning needs a new approach, a new design, a total overhaul in the way it is approached.

So what has been one of the biggest downfalls of elearning? Research points to the lack of interaction as one of the top, if not the top, shortfall of elearning. Now what do virtual worlds provide people with? A high degree of interaction. The combination of virtual worlds and online gaming approaches to elearning could lead to monumental advances in online education and large scale training. Think back to any elearning experiences you may have had in the past. How did most communication take place? Periodic emails, if you were lucky occasional chats, maybe some message board interactions. Most of these interactions were probably student-instructor related. How about student to student interactions? If you were not in any virtual teams, you may not have had any. So what happens to the incidental learning that takes place in a classroom when you can interact with other students? It has vanished.

What about Learning Management Systems? These are supposed to help elearning, foster interactions, and create a virtual environment for learning. What do most LMS provide? Email, message boards, chat features, drop boxes, file sharing areas, maybe a few synchronous presentation tools. This still does not provide additional opportunities for interaction; this is just a centralized area for most asynchronous student –instructor interactions to take place.

Now, envision some of the functionality of a LMS combined with all the interaction, social, and community building opportunities of a virtual world? The opportunity to innovate the entire field of elearning is limited only by designer's and developer's creativity. Now instead of just getting an email from the instructor, you could actually come to a virtual classroom, a synchronous, graphical environment, interact with your instructor in a meaningful way, as well as interact with other students. Not only can you interact with people, but you can interact with the environment in a meaningful way. Go to a virtual library, a place with a collection of resources you can view that will take you to all sorts of relevant places on the web, or provide you direct access to class-related files. Have a virtual team meeting in a café, where you can share all of your virtual resources, complete assignments, problem solve, and simply interact with your classmates...something that has been missing from elearning for a long time. The same holds true for corporate training. ASTDs 2002 Industry Report claims that organizations have budgeted \$54 billion dollars for training in the United States alone, a significant percentage focused on elearning. Instead of providing the cookie cutter, limited impact elearning courses that are out there now, why not provide an extremely rich, engaging, user driven/instructor facilitated learning environment within a virtual world? Research points out that the average age of gamers is approximately 32, and the age of MMORPGs gamers is even older. This type of learning not only will impact individuals at the student level, but also our professionals in the workforce.

Research points to the social aspect of online gaming as one of the biggest attractions for players. Nearly everyone uses instant messaging technology (IM) nowadays, but when adding a graphical layer to this, with a virtual representation of yourself (avatar), people appear to be much more engaged. Virtual worlds and the real world are bleeding together more and more. People are paying real money for virtual goods, selling real estate, and even suing other players for virtual theft of in-game goods. People not only have

emotional investments in virtual worlds now, they have large economic investments. People immerse themselves in these VWs. Imagine people being able to immerse themselves in such a world that also happens to be where virtual classes take place that provide limitless education and training opportunities?

People become attached to their VW persona and character. Interactions become much more meaningful with a representation of yourself on the screen interacting with others verse just lines of text. This is what constituted elearning; lots of small, impersonal interactions between primarily the instructor and student, mostly text-based. Now, with the creation of a Virtual Learning World (VLW), interactions become much more meaningful, and a learning community can thrive. The problem with LMS systems now is students only login for brief periods of time to submit assignments, send a quick email, or post a message. Now, with VLWs, there is a persistent world where students can login simply to interact, explore, or relax. There is incentive to login and to meet new people.

All of these virtual world inhabitants are there for a reason, whether it be social interaction, the allure of the particular game, or both. Conversations often begin with “What other online games have you played?” and “Have you been to this cool place yet? Let me show you.” Many times these simple introductory conversations spark an online friendship that can last for years, and sometimes even cross over to in person, face-to-face meetings and friendships. In a VLW, interactions may start out something like “What school are you from?”, “What classes are you taking?”, or “Have you been to the virtual library on the south side of Virtual U?” The inhabitants of this VLW are there to learn and interact with their peers. This brings incidental learning, interaction, and community-building opportunities to elearning, things that are critical to elearning that have been missing since the beginning.