Virtual Worlds for Learning

HOW IBM USES IMMERSIVE ENVIRONMENTS FOR TRAINING

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International Business Machines (IBM) believes that virtual-world technology will make a global impact and change the way business (and learning) is done. The global technology company uses virtual worlds to meet many organizational training needs, including employee orientation, sales training and employee collaboration.

IBM is well regarded in many industries as an expert at applying technology to business. The company employs 330,000 people in 210 countries. Two out of every five employees work in an alternative location (i.e., not a corporate office), and 55 percent are engaged in some kind of online learning.

Because of the global dispersion of IBM' s workforce and the priority that is placed on

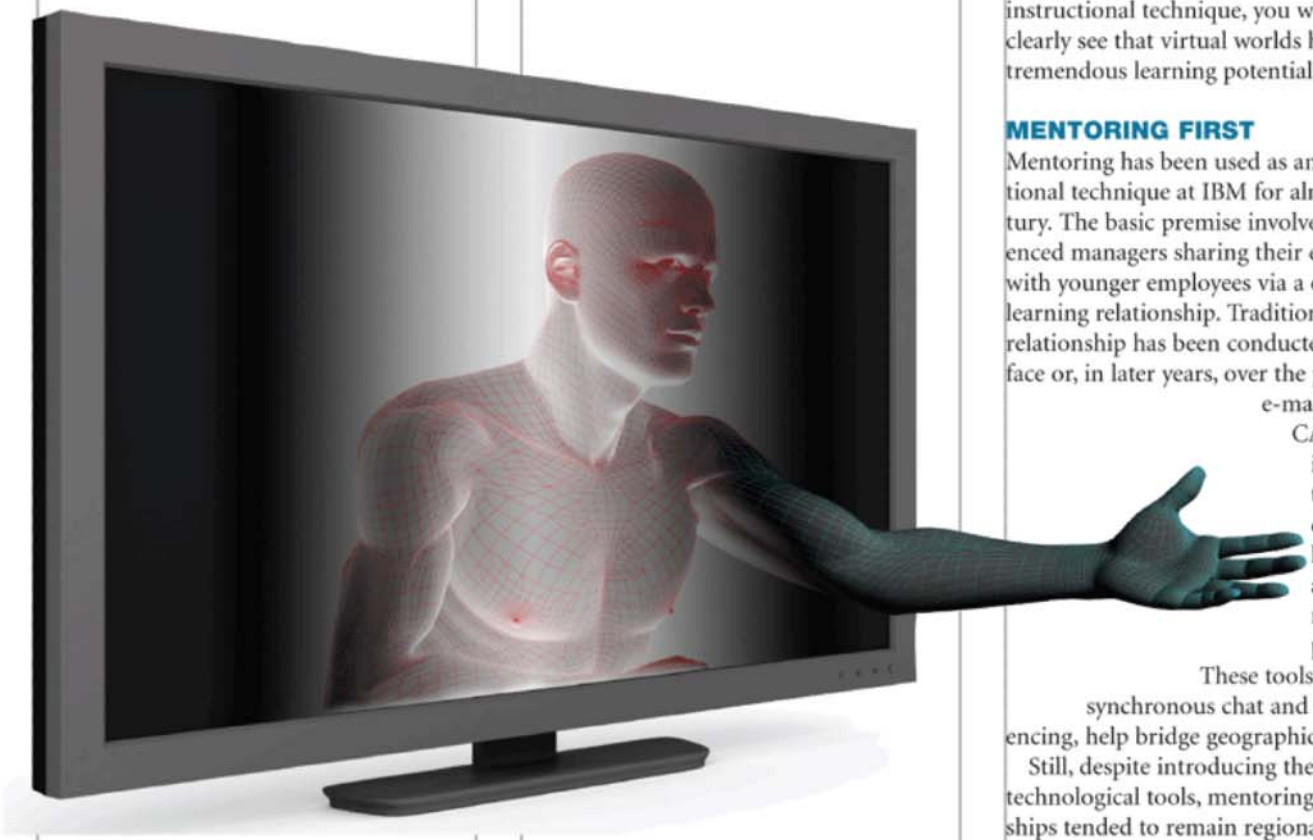
life-long learning, applying new learning technologies to meet corporate training needs is critical to IBM. As part of its organizational structure, IBM houses the Center for Advanced Learning (CAL), whose mission ensures that technology that is useful for delivering learning is used for IBM learning programs. CAL accomplishes its mission by researching new technologies, deciding if technologies can be used to further learning, piloting new delivery methods, and assisting in the logistics of implementing new learning technologies. These activities take time, yet — recognizing lack of time as a barrier for an organization striving to keep ahead of the technology wave — IBM has committed to spending the time necessary to complete this research, which is a key component of CAL' s success. CAL takes the time to conduct proper evaluative research of new education technology and even invents new technology for IBM and others.

One technology being piloted at IBM is Immersive Environments, but others are also used. Social software technologies such as blogs, wikis and podcasts have been used throughout IBM for years. It also has a "Facebook"-like tool called BluePages that connects IBM employees throughout the world. In this global village, IBM recognizes the importance of relationships and leverages technologies to facilitate communication among its globally dispersed employees.

CAL's experimentation helped determine that using virtual worlds might help develop international mentoring relationships.

As an innovative company focused on technology, IBM' s senior leaders often take a vocal stance on renaissance technology like virtual worlds. Was there ever a time in the company' s past when the senior voices of IBM seemed this excited about any other technology? When e-learning itself was introduced a decade ago, the intensity of top-down support felt similar to the current hype over virtual worlds. This time, however, the enthusiasm permeates from employees at every level, every discipline and every country. To borrow a phrase from former President George H.W. Bush, Hamilton characterized this organic interest as "1,000 points of light."

A key aspect of training involves new employees acquiring basic skills and knowledge before they start their core work, which can be achieved through mentoring, one of the oldest instructional methods. Further, by examining how new technology is applied to an age-old instructional technique, you will more clearly see that virtual worlds hold tremendous learning potential.



MENTORING FIRST

Mentoring has been used as an instructional technique at IBM for almost a century. The basic premise involves experienced managers sharing their experiences with younger employees via a one-on-one learning relationship. Traditionally, this relationship has been conducted face to face or, in later years, over the phone or by e-mail. Through CAL' s expertise, more technological tools have been added to the mentoring programs. These tools, including synchronous chat and Web conferencing, help bridge geographic distances.

Still, despite introducing these modern technological tools, mentoring relationships tended to remain regional; for exam-

ple, a European employee would likely have a European mentor. This would be fine if IBM were a regional company, but, in fact, it is global, so an employee in South America might be a better match for the younger European employee.

ENTER TECHNOLOGY

CAL' s experimentation helped determine that using virtual worlds might help develop these international mentoring relationships. When CAL evaluates a technology, it looks at all products. During the evaluation, CAL identifies and follows a set of standards to which the technology must adhere: scalability, avatar capacity, features and functions, and ease of integration. Based on these evaluations, IBM decided to use Second Life for virtual world purposes, but the company does use other virtual worlds as well. Both Hamilton and Tony O' Driscoll confirmed one virtual world trend: in the near future, hundreds of virtual world platforms will become available.

IBM mentoring now takes place in Second Life, resulting in more international mentoring. Employees (as their avatars) meet in Second Life, where they are mentored by senior employees who may be continents — and even cultures — apart.

Hamilton notes that the impact of removing cultural barriers by using virtual worlds cannot be underestimated. In the hypothetical example of the South American employee mentoring a European employee, these cultural barriers would be insurmountable using the previous synchronous technology. Yet these barriers have been overcome using avatars in virtual worlds.

A second positive impact of virtual worlds on the IBM global mentoring system involves decreasing the amount of time required to meet. For example, using a virtual world, an employee could e-mail or chat with his or her mentor, asking to meet in Second Life in 10 minutes, and then that's it for organizing the meeting. Previously, a number of desktop applications were involved to set up and hold the meeting, resulting in additional barriers, fewer connections and less personal interaction.

A third positive impact of virtual worlds is that the creativity behind avatars often communicates an employee' s entire personality in more breadth without any words. Before virtual worlds, the extent of expressing creativity existed, perhaps, in a person' s choice of a colorful tie. Now, it is perfectly acceptable — and even encouraged — for employees to spend time creating their avatars by injecting their own personalities. For example, Hamilton plays in a Celtic band in his non-work life; therefore, his avatar wears a kilt. This feature volunteers a trait about himself well before any business talk begins.

CAUTIONARY POINTS

Because it is difficult to measure the success of a virtual mentoring program, much of the success is determined through perception. It is difficult to confirm how many mentoring relationships are maintained in the virtual world. Plus, the program is still at the pilot stage; data will be gathered as the program continues.

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Despite the difficulty judging the success of the program, the reaction of participants has been overwhelmingly positive, and a high number of employees have chosen to try the program. In a virtual world orientation program focused on India and China, thousands of avatars participate and learn together.

Barriers to participating in the virtual mentoring program also exist. The primary technology barrier is that the interface is new, and learners take time to learn how to operate in this environment. Bandwidth challenges also present a potential barrier. Secondary barriers include accepting "gaming" as a part of work and fearing resistance from superiors if they see a gaming environment on the screen.

Resistance from superiors appears legitimate; however, in the innovative culture of IBM, this barrier is only perceived — or simply remains a barrier for a brief time until the boss learns to appreciate that both play and serious games are a valid part of the IBM workplace.

The preceding information is taken from a new Brandon Hall Research report titled "Virtual Worlds for Learning: How Four Leading Organizations are Using Immersive Environments for Training." For more information on Brandon Hall Research, visit the Website www.brandon-hall.com.