

Educational Advantage

By Tischelle George With Marianne Kolbasuk Mcgee – Information Week – March 2005

E-learning helps companies capture the knowledge of retiring employees and gain a competitive edge

When NASA discovered that 60% of aerospace workers are slated to reach retirement age in the next few years, it needed to find a way to capture knowledge from exiting workers and make it available to remaining and future workers. "The concern is that the existing Apollo-era workers will take their knowledge with them," says Tom Cavanagh, a program manager at the Florida Space Research Institute, a nonprofit organization that promotes academic and economic aerospace development initiatives and works with NASA on this problem.

NASA and Workforce Florida Inc., a workforce-development and policy group, turned to the institute to provide courses and programs that would facilitate intergenerational knowledge turnover for workers at the Kennedy Space Center. "We've also begun a mentoring program to hand the knowledge of one generation to another," Cavanagh says. "It's all about using E-learning and virtual collaboration to capture information so that it's retained online."

Another organization attempting to capture knowledge from an aging workforce is the San Francisco Bay Area Rapid Transit District. The agency is faced with rapid turnover as a large number of its employees reach retirement age. "BART is 30 years old, and a lot of the people who started the organization are still here," says Karen Arhontes, supervisor of technology-based training for BART. Twenty of 36 employees in the training department alone are approaching retirement age, Arhontes says.

To make sure that years of knowledge aren't lost, BART is using threaded-discussion software, C-image's document-management system, and Pathlore Inc.'s learning-management system. Pathlore's system stores training material and bulletins such as notices about procedural changes. The document-management system includes a knowledge-management repository, which BART plans to implement later this month, where employees preparing to depart can organize and store the information they keep on their PCs. The threaded-discussion component, which was developed in-house at BART using Lotus Notes, is used by employees to report how they solve problems and is accessible via an intranet.

The next step for BART's training department is to create online courses based on information gleaned from employees in the threaded discussions. "Right now, we're trying to use the technology and traditional methods of training," Arhontes says. "But once we get those practices together, we'll create online courses around them to distribute to employees."

Finding ways to capture the knowledge of retiring and other exiting workers is only one of the drivers behind the ongoing push in government agencies and business to better educate employees. Companies also combine knowledge-management and collaboration tools with E-learning and learning-management systems to gain or maintain a competitive edge. Sales of E-learning products, which were \$2.4 billion last year, are expected to grow 40% to 50% a year, Gartner analyst James Lundy says. About 85% of companies are testing or using some sort of E-learning ware, Lundy says.

Telecommunications company Verizon Communications has been using E-learning to share employee knowledge for about three years. The Verizon training department, which includes an internal E-learning development group that's responsible for developing E-learning courses, relies on in-house experts to work with the development team to create training courses.

If Verizon is developing a course on how to properly install DSL, subject-matter experts explain how it's done to an instructional designer who programs the course, using simulations if the employee has to perform hands-on activity. Then the designer takes the content that's written in instructional-design format to three other companies and to an in-house group for bids, says Eli Munzer, Verizon's chief E-learning architect. Verizon outsources a lot of its E-learning work because its development needs often exceed the resources of the 10-person E-learning development group, Munzer says.

The company's goal is to build courses based on knowledgeable employees and to develop courses using reusable learning objects, which should make development faster and less expensive. "As we create courseware over time, we're creating massive amounts of knowledge that can be treated as separate tidbits of information," Munzer says.

Cutting development time is a goal for Verizon because sometimes a training request is based on extreme need, Munzer says. "The group that's requesting training is willing to take their people out of productive work and put them through training to help them get better," he says. "So if someone comes to me in the morning and says they need a class, my goal is to have it online and available to all Verizon employees that evening" by using reusable learning objects.

In competitive industries, knowledgeable employees can make the difference in which company gets the business. Turner Construction, a North American builder with 5,000 employees in 27 states, wants not only to have the knowledge edge but to become the company that other builders come to for their learning resources.

Turner created an Internet-based knowledge network and a public Web site at www.turneruniversity.com that's based on a learning-management system from Intellinex LLC, an E-learning subsidiary of Ernst & Young, and a document-management system and online collaboration software from Open Text (NSDQ: OTEX) Corp. The learning-management, document-management, and virtual meeting-place software work together to store construction-related manuals and E-learning courses such as a 30-hour Occupational Safety and Health Administration workplace safety course.

The next step for Turner is to add knowledge management to the E-learning network. "What's missing is the personal side of collaboration that allows you to talk with a subject matter expert," says James Mitnick, senior VP at Turner Construction. Turner is awaiting the release of a knowledge-management component from Open Text that's expected to be available this summer. The goal is to let people have online discussions with knowledgeable peers about any topic. "If people want to learn more about estimating a construction job or how to install concrete floors for a semiconductor facility in Arizona, they can join an online community and discuss issues," Mitnick says.

To get employees acclimated to sharing knowledge online, Turner uses Open Text's online collaboration software. Educating employees gives Turner a competitive advantage, Mitnick says. Customers "hire us over our competitors if we have better-trained employees."

Knowledge management can be a sticky issue for companies, because there's often no incentive for employees to share their knowledge, says BART's Arhontes. But using some form of collaboration software or E-learning to share knowledge makes the process less painful, because it gives employees an opportunity to share and learn from each other simultaneously.