



E-Learning at a Bargain Price

Cost-conscious training project in Multnomah County, Ore., earns NIGP's Innovation Award

By Larry Anderson

When Multnomah County, Ore., transformed its purchasing processes with a new Enterprise Resource Planning (ERP) system, the central purchasing department had an urgent need to train internal clients in new tools and processes. The department also sought to train internal clients to a common level of understanding to ensure better overall business planning, better procurement and contracting, and better business administration. In addition to training 120 high volume users, the department wanted to provide a training source that low-volume users could access as needed and others could use as a reference.

The department developed a system to deliver computer-based training in-house at a 69 percent cost savings compared to contracting with an outside vendor. "Using an outside company didn't make sense from the perspective of being flexible and self-sustaining," said Brian R. Smith, Multnomah County's purchasing manager.

“We started looking at how we can do this in-house.”

“The development of computer-based training combined with traditional classroom training has given us the ability both to develop training and to deliver it in non-traditional methods, all at a relatively low cost,” said Smith. Multnomah County’s project to implement e-learning was recognized with the Innovation Award at NIGP Forum 2012 in Seattle.

ENSURING CONSISTENT KNOWLEDGE

Multnomah County provides an array of services, from bridges and roads to human services. The annual contract spend exceeds \$300 million. The county operates a hybrid, centralized/decentralized procurement operation, with the county’s formal procurements (more than \$150,000) handled by 18 full-time equivalent (FTE) employees in the central purchasing group. Another 350 or so other people have purchasing as some part of their jobs, but the county didn’t have a handle on exactly who was administering contracts in the various client departments. Dealing with the changes of the new ERP system required them to find out.

About 120 internal clients were identified as key people involved administering contracts in various departments, although many of their jobs are primarily focused on providing services to taxpayers, not on the business aspects of operations. The internal clients had limited exposure to the business aspects of procurement and contracting processes. “They [may] have expertise in social work, for example, but they depended on others to consider the business side of contracts,” said Smith. “But we no longer have the people or time to afford that luxury – we have to have some consistent knowledge of contract business systems at the start in the initial scope development and continue that understanding through the contract development and administration cycle.”

“Part of the value-add that central purchasing brings to the organization is training at all levels,” added Smith. “We wanted to do more training and better training using various methods to bring our expertise to enable the departments to do a better job.”

Looking at the scope of their needs, the department realized immediately they were not training experts. The initial thought was to contract training out, and there was some discussion with a prominent national training delivery firm. Barry Zimmerman, procurement and contracts supervisor, attended a four-day training session provided by an outside firm at a municipal agency also involved in undergoing large procurement process changes. Multnomah County even requested a budgetary quote for a semi-custom classroom/e-learning program from an outside firm.

But the outsourcing approach had problems. For one thing, after an initial push on training, there would be an ongoing need to update content and do refresher training. To meet those needs would require that the county own the curriculum content to avoid paying additional licensing

fees for retraining and for customizing the curriculum. Also, the cost of top-flight training was way too high.

FROM CONTENT TO SOFTWARE TO DELIVERY

The department opted to develop its own course material, both for traditional classroom learning as well as computer-based learning and reference. A five-person team outlined the course, added content from other courses where they could, and developed drafts of materials where none existed. All the team members’ primary functions were in procurement and contracts, but some had experience in developing other materials and delivering it to users. Once the material reached a completed draft stage, it was provided to selected individuals in various departments to critique and finish. Development began in January 2011 and the first course was delivered in June 2011. The individuals working on the project did so as a secondary responsibility.

The central purchasing department began looking for software that could be used for training. They quickly found that the county’s human resources (HR) department was using Adobe Captivate software, which enables users to combine visual and audio content into a finished course. There is a solid base of people who know the product, it is easy to learn, and outside expertise is easily available if needed. Captivate was adopted as the county standard. Talent development specialists in HR helped the central purchasing team learn how to use Captivate and also helped develop a Multnomah County and Multnomah County Purchasing brand to be included in all training. HR also shared their expertise in adult learning and how it can be structured. A short-term employee was brought in to work full-time for about three months on course development and to train central purchasing staff on how to use Captivate. She also created standard templates and designs and developed procedures and training for audio recording.

“We thought it would be 24 hours of training,” said Zimmerman. “Then we scaled it back to 16 and then later down to six hours if you take all the courses back-to-back.” The end-product was a 191-frame presentation with review questions after each of six sections and an end-of-course review.

Central purchasing also needed a learning management system (LMS), a Web-based e-learning delivery system, and settled on Moodle, an open-source platform. The system handles registration for courses, delivery of course content and provides access 24/7 using a guest-pass system. The e-learning platform is available on the county’s secure network and can be accessed county-wide. Moodle is an abbreviation for Modular Object-Oriented Dynamic Learning Environment.

The Moodle system offers more flexibility than a webinar, for example, in which streaming content is delivered and someone listens in (maybe with a Q&A at the end). “The technology enables you to track who’s taking the course and to incorporate feedback and interaction in the form of quizzes,” said Smith. “It really gives you a much better sense of a two-way street. There

is a specific followup to get feedback from people who took it.”

The system also keeps up with which modules have been completed. Based on incorrect answers, the LMS automatically refers students back to the appropriate section they missed, and keeps a summary of sections missed in the aggregate. Although the computer-based course was available in late-June 2011, implementation was delayed until September 2011 to coordinate with roll-out of the county’s LMS system.

TECHNOLOGY PROVIDES FLEXIBILITY

Multnomah County central purchasing began by creating a Basic Contracting module and has additional modules, such as Unauthorized Purchase training, in development. The county already has multiple existing training programs in PowerPoint that they will transition to the e-learning system. Creation of some additional modules is being delayed until the new ERP system is fully implemented.

“As purchasing professionals, we are constantly asked to do more with less, including training of our internal clients,” said Smith. “Training is a big part of extending the limited resources of procurement. It’s one of the ways we can provide value to organizations.”

New technologies provide much greater flexibility to provide training content beyond the traditional paradigm of gathering people together in a room, which is still the prevailing standard. Combining Web-based training with the availability of free or low-cost technologies can improve a procurement department’s ability to train, while providing content on-demand to enable employees to access the training anytime and any place, to fit their individual schedules.

An advantage of computer-based training is that it can be taken in small modules. The course can be stopped at any point and then re-entered where the last completed module was done. The student has 60 days to complete the course.

“Traditional classroom training is the right option for some, but others need to be able to take it on the road and fit bits into the available time in

their increasingly busy schedule,” said Smith.

While some people embrace an electronic format, others prefer to engage in-person. A surprisingly successful method Smith has found is a “hybrid” approach involving presenting the electronic content in a classroom setting and interrupting the presentation periodically to have discussions. “We have done a couple of them and people like the format,” Smith said. Another hybrid benefit is to expand the department’s instructor pool to include those who might not be comfortable doing a full presentation but can handle Q&A after the module has played for 10 minutes or so.

The feedback sessions from both the classroom and on-line training identified that users favored one method or the other. Offering both methods has provided more than 70 completions with another 20 participants identified as starting the computer-based training, a remarkable 75 percent of targeted participants.

MOVING BEYOND POWERPOINT

“There are a lot of technology tools that can extend your ability to support your internal clients, and they are getting increasingly easy to use,” said Smith, who has even seen new technologies emerge since implementation of the Multnomah County training system 18 months ago. “The tools that are available have already changed, and we might not do it this way if we had it to do over. There are now new tools, and some are better. That’s the constant challenge, keeping up with the technologies.”

Central purchasing is also implementing technology tools they learned in the training project for other parts of the business. For example, free screen capture tools enable them to provide visual elements to accompany written instructions related to operating the new ERP tool. “It really helps to bring business process documents to life,” said Smith. For example, a recent document required explanation of 27 steps, and doing so in a couple of sentences per step with a screen capture was easier than using many more words.

The experience has also helped the department move past the restrictions of PowerPoint. “We now understand visuals and the adult learning concepts. Also, people learn in different ways. For example, younger people have shorter attention spans and want video and visuals. We are learning a lot about that. Anybody who does this, there are a lot of takeaways about the technology and adult learning that you can apply across the board.”

Another benefit of owning the content is the ability to make it available to other jurisdictions in the public purchasing tradition of sharing. The Captivate file of two Multnomah County contract administration modules are available (without the LMS functionality) on the NIGP Web site at <http://nsite.nigp.org/NIGP/Home/>. After log-in, select the Communities tab, then Technology in Procurement. There are two files in the Library labeled e-learning examples. <



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