Santa Cruz County's eLearning

DAVE EISENLOHR

EXECUTIVE SUMMARY

Santa Cruz County Human Services Department has adopted a Learning Management System (LMS)[1] that incorporates eLearning software[2] to deliver classes to the desktop, augmenting Staff Development's efforts to educate staff. Contra Costa County has identified eLearning as a potentially valuable tool and accepted Santa Cruz County's invitation through BASSC to examine its learning system. Through participation in this assessment, I examined the issues surrounding adoption of an LMS and eLearning software, identified applicable lessons learned, and helped assess expectations for deployment within Contra Costa. The final deliverable for this assessment was a set of recommendations on potential adoption of a LMS within Contra Costa County.

---

[1] An LMS System is used to host training content and track results.

[2] eLearning software is used to create the training content, such as presentations, quizzes, which then can be hosted in an LMS.

David Eisenlohr, Manager of Information Systems II, Contra Costa County Employment and Human Services Department

Santa Cruz County's eLearning

Dave Eisenlohr

Background

Santa Cruz County is situated 65 miles south of San Francisco. About 60 percent of its 254,538 residents are divided among its four major cities: Santa Cruz, Watsonville, Scotts Valley, and Capitola. Thirteen percent of the residents live at or below poverty level. To support those in need, Santa Cruz County has Human Services offices in Santa Cruz and Watsonville, which are approximately seventeen miles apart. They also have a satellite career center in Capitola.

The Human Services Department administers federal, state and local public assistance and social services programs such as Temporary Assistance to Needy Families; Welfare-to-Work; General Assistance; Food Stamps (Snap & Cal Fresh); Medi-Cal; Child and Adult Protection; In-Home Support Services; and Foster Care. Staff Development provides program-specific training for new employees and ongoing training for all employees to meet state-mandated regulations and to provide updates on changes in policies, local procedures, and business processes. To comply with state regulations, they also provide continuing training for social workers, fraud training, civil rights nondiscrimination workshops, and injury and illness prevention training. Other training includes skill development in areas such as technology, supervision, management and leadership, personal effectiveness, cultural competence, and customer service.

Many of the program-specific training requirements are founded in law and defined by state and federal regulations. These mandated requirements specifying certain functions, tasks, and processes the county must perform, often including very specific requirements as to how they must be carried out, in what time frames, and with what degree of accuracy. If these mandates are not carried out, the county and employees who knowingly fail to comply with the mandates are subject to legal penalties and audit.

Why LMS and eLearning

The complexity of these regulations and the risks associated with non-compliance create a significant need for an effective training program. The issue is exacerbated by the regulatory environment itself. The regulatory environment is in a constant state of change at the federal, state and local levels. Budget changes, social priorities and public outcry, to name a few, all prompt changes within the regulatory environment. Additional factors include system enhancements, developments of new functionality, and business process changes. This constantly changing environment creates the need to train and retrain staff on a regular basis and underlines the importance of staff development within a social services agency.

Regulatory mandates also apply to many of the training programs themselves. For example, federal regulations mandate non-management personnel attend sexual harassment prevention classes every three years and managers are required to attend a different class every two years. These mandates require counties to collect and retain documentation on who attended, when they attended, and the job function they held at the time.

The following logistics of the training effort were the driving forces behind Santa Cruz County's decision to adopt an LMS that incorporates eLearning tools:

- Given class size limitations, a subject matter expert (SME) is often required to teach the same

class multiple times. This repetitive behavior is a drain on business expertise that counties can ill afford. With or without eLearning, the SME works to develop the class material in collaboration with Staff Development; however, with eLearning, the SME is then freed up to address other issues or training materials instead of performing the training.

- When a large group of staff leave a program's unit to attend a training class, it creates a significant burden for management to create a coverage plan and coordinate absences. Without eLearning, the training often disrupts a unit's productivity. With eLearning, the classes become self-paced, which permits increased flexibility in scheduling. Training schedules can adapt to the needs of the unit's staff. And, unlike formal classroom training, LMS/eLearning systems often provide the ability for a student to bookmark his lesson, stop the class, and return at a later date to continue from the exact spot where they left off.

- Budget reductions prompted significant cuts in clerical staff and other non-revenue generating positions. With a significant reduction in staffing, the clerical function of performing class registration, tracking attendance, and preparing reports as required by program mandates were an administrative duty the agency could ill afford. An LMS enables staff to self-register, provides management with reports for tracking registrations and attendance, and automatically collects and records grades for reporting where required.

- eLearning also ensures a consistent training experience so all staff receive the same instructions and educational experience. The training content is also available online for future refreshers and redeployment.

- The time required for the trainer and the staff to travel to a class wastes time and expenses. This is exacerbated when supporting multiple regional offices. With training delivered to the staff member's workstation, travel time is eliminated.

- Program mandates place significant requirements on training and record-keeping, and out-

line potential consequences for non-compliance. For example, ACL 08-23 Child Welfare Training Regulations require social workers to complete 21 or more classes within 2 years of their initial employment or after a significant change in job duties and they require additional training be conducted on an on-going basis. Regulations also specify that records must be kept for a period of 3 years and that CDSS can adjust a county's Titles IV-B and IV-E claims for failure to provide adequate training.[1] An LMS automates this record-keeping requirement and enables the reporting of staff who are out of compliance with these mandates. This greatly simplifies compliance administration.

Given these business drivers, Santa Cruz decided to move forward and adopt an LMS system that incorporates eLearning.

Procurement

Santa Cruz developed requirements for the LMS, course content and user interaction. The LMS criteria included the following:

- The LMS system must fit within the county's IT infrastructure to minimize installation costs, support costs, and training requirements. These factors include: linking with the county's directory to identify users and their membership in various groups; allowing for single sign-on; and ensuring the product is browser based.

- Use the Sharable Content Object Reference Model (SCORM)[2] standard to ensure eLearning interoperability.

- Provide multiple methods of registration including automatic by role, self-registration, and the ability for supervisors to register staff.

- The LMS must provide for reporting of attendance, results by course and by learner, and a list

---

1 http://www.dss.cahwnet.gov/lettersnotices/entres/getinfo/acl08/08-23.pdf

2 Sharable Content Object Reference Model (SCORM) is a collection of standards and specifications initially established by the Department of Defense for web-based e-learning. It has become the defacto industry standard and defines communications between client side content and the learning management system. See www.scorm.com and www.adlnet.gov/About/Pages/adlinitiative.aspx for additional details.

of who has not registered and or who has missed deadlines.

- Include classroom wait-listing and classroom size limits in the registration process to optimize use of its facilities and minimize the number of formal classes.

The eLearning requirements affect course content and user interaction. The requirements included:

- Content creation must allow for the use of voice narration and text-to-voice recognition through basic audio files.
- It must allow for inclusion of other files such as videos and pictures.
- It must have the ability to produce basic animation based on PowerPoint functionality.
- It must have the ability to punctuate courses and chapters with quizzes and report the results back to the LMS.
- It must allow for self-guided learning to permit the user to restart courses where they had previously left off.
- eLearning quizzes have a number of criteria: they must be able to auto-grade and display results back to the learner; to limit the number of attempts from one to unlimited; to support multiple types of answers including multiple choice, true/false, fill in the blank, and essay type; and to set time limits for completion.
- eLearning tools must allow for interactivity of course content to URL's, and supporting documents.

Santa Cruz's IT infrastructure is based on open source technologies.[3] This permitted Staff Development to evaluate alternative LMS packages, select a preferred system, and procure it. At that time, a project was formally launched to contract for installation services and support services. From the onset, the project addressed human resource policies, personnel policies, and regulatory policies, as well as course development, security, user support, capacity, and fault tolerance.

Installation

First, an LMS test system was installed. This system was used to address issues prior to going live, to support User Acceptance Testing, and on an on-going basis, to develop and preview course material. A production LMS system was installed just prior to deployment. To prepare eLearning course material that complies with SCORM standards, Santa Cruz chose Adobe Captivate authoring tool to produce the SCORM package. There are many other alternatives that meet the rich multimedia needs of the county, but all of these tools require specialized skills. As a result, preparation of eLearning materials requires both a Subject Matter Expert (trainer) and a person with experience using a SCORM-capable authoring tool. Camtasia Studio is used to develop training videos. These software needs prompted installation of a multimedia PC dedicated to preparation of course material and available for use by subject matter experts.

Once testing began, the county defined a number of customizations to address enterprise-level concerns.

- Users are defined as belonging to various groups. Some members belong to more than 30 groups, which exceeds system limitations within Outlook that impact LMS implementation.
- User training history must be maintained regardless of a change in job function or group membership, which required using the employee ID as the unique ID for record retrieval.
- Enrollment in courses needs to be automated, based on regulatory mandates, such as "once every two years."
- Role-based administration is needed to allow supervisors to view learner data and to allow assistants to run reports.
- The registration process generated too many e-mail notifications. Notifications need to be disabled individually, based on notification type.

---

3 Open Source refers to a type of software that is made available for free and may be redistributed with or without modification. It often refers to software that runs on a Linux platform that is also open sourced.

Results

During the fiscal year 2010–11, Staff Development trainers provided over 1,507 hours of classroom training. Most of these classes were administered through the LMS, saving significant clerical time. The LMS Staff Development continues to develop technology-based training solutions to allow workers to gain knowledge and skills without having to leave their office. Using both the LMS acquired last fiscal year and video development technologies, eight interactive online trainings were created that deliver training directly to user desktops. The LMS hosts eLearning training for Disaster Food Stamps and PII confidentiality training. The eLearning tools have also been used to develop videos with integrated quizzes for Fraud and for Electronic Benefits Transfer. Other videos that have been prepared include a video hosted on YouTube.com called "How to complete the QR-7" and internal educational videos on grant development and employee orientation. Many other courses are planned or in development. The LMS and eLearning capabilities have proven to be "force multipliers" for Staff Development's eight staff in addressing the training needs of Santa Cruz's Social Services Department,

Conclusion & Recommendations

A strong Staff Development team is vital to executing social services mandates. Given the compelling need to optimize the use of an SME's time and to minimize the operational impact on program units; the budgetary impacts of reduced availability of support staff to manage registration, tracking attendance, and preparing reports; and the multiple benefits of eliminating travel to and from classrooms, Contra Costa County would benefit greatly from adoption of a Learning Management System that incorporates eLearning. Given the complexity of needs, it is far more effective to procure an "off-the-shelf" solution than to build or enhance an in-house system.

The requirements developed by Santa Cruz are portable to Contra Costa and to the BASSC community as a whole. Given that many of the courses are directly transferrable to other counties (such as training on programs, fraud, safety, sexual harassment, and discrimination), there are several recommendations for BASSC counties:

- All BASSC counties should strongly consider adoption of SCORM standards as part of their eLearning systems. As noted above, adhering to these standards allows course content to be readily transferable to SCORM-compliant Learning Management Systems.
- BASSC should consider creation of an eLearning library where counties can upload source libraries and SCORM packages for sharing among counties.
- The Staff Development units in each county should consider organizing a structured plan for course development to eliminate duplicated efforts in the building of an eLearning library.

Acknowledgements