

# E-Learning: Santa Cruz County's Strategy For Mandated Training

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## EXECUTIVE SUMMARY

County human service departments typically administer programs that serve all ages and diverse needs. County staff development units are responsible for training these (often complex) programs to new staff, and can often be left with few resources for providing support to continuing staff. As the pace of regulatory and technical changes picks up over the coming months, counties will be challenged to provide an effective and efficient means of preparing all staff for these changes.

E-learning, also known as online learning is a method of transferring skills and knowledge with the use of computer. E-learning is a tool that can help human service departments keep pace with mandates, regulation changes and system updates, which are occurring with increasing frequency. E-learning is a promising model for human service department training for many reasons, including its relevance, pervasiveness, adaptability, efficiency and consistency.

In early 2009, Santa Cruz County took the initiative to implement a Learning Management System (LMS) in response to a 2008 MEDS privacy training requirement. Staff development and IT experts were recruited from within their agency to customize the LMS to manage their training, including e-learning. Santa Cruz County managed to meet its goal of full implementation and deployment of the MEDS confidentiality e-learning course by June of 2010, but not without some challenges and lessons learned. They hope to see the formation of a library of standardized e-learning courses for county human service departments to share.

Sonoma County Human Services Department has just contracted for an LMS which will assist staff development to develop e-learning courses that will help the department's economic assistance staff meet the challenges that lie ahead.

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## What is E-learning?

E-learning, is essentially the computer and network-enabled transfer of skills and knowledge<sup>1</sup>. E-learning, also referred to as online learning, or computer-, internet-, or web-based training, can be delivered via the internet, intranet, satellite TV, or CD-ROM. E-learning can be stand alone, integrated into the classroom or collaborative (using blogs, wiki websites, or podcasts to interact with other trainees). It can incorporate media, such as video, audio, animation, streaming, and text-to-speech.

## How does E-learning work?

E-learning works best when it is part of a comprehensive learning management system (LMS). An LMS is software used for delivering training to staff, tracking staff participation, and managing their training records. Training managed by an LMS can be online, virtual, or instructor-led. An LMS typically provides tools for registration, communication, presentation, assessment, and reporting, but it can also be any combination of these or other tools.

### Sharable Content Object Reference Model (SCORM)

A collection of standards and specifications for web-based e-learning . . . developed by the US Department of Defense. SCORM tells programmers how to write their code so that it can "play well" (communicate) with other e-learning software, just like the DVD standard makes sure that all DVDs will play in all DVD players<sup>2</sup>.

An authoring tool is used in conjunction with an LMS to allow non-tech savvy users to easily create e-learning courses. Some authoring tools enable the conversion of a presentation (eg. one using PowerPoint) into a course to which audio, text-to-speech, video, URL links, interactivity and quizzes can be added. Courses created by an authoring tool usually conform to the Sharable Content Object Reference Model (SCORM) standard (*see below*), so that they can be used with other e-learning software, inside and outside of an organization.

## E-learning Trends

E-learning started as an experiment for teaching math to children in the 1960s<sup>3</sup> and now is used by almost a quarter of all students in the United States in post-high school education<sup>4</sup>. Trends in e-learning include:

- Blended Learning, where computer-based activities are integrated with classroom-based training<sup>5</sup>;
- Social Learning (E-learning 2.0), which places increased emphasis on the use of social software such as blogs, wikis, and podcasts<sup>6</sup>;
- Channel Learning, where organizations share online content<sup>7</sup>.

## Why E-learning?

The use of computers for learning is relevant to an electronic media culture. Computers are already indispensable tools in human services agencies for delivering services to clients, and most of us are never separated from electronic media in our personal lives.

E-learning is pervasive in everyday life. Its use is rapidly rising for all levels of education, and it is a popular option for traffic violation school. Health maintenance organizations are harnessing e-learning for health education and prevention. The U.S. Navy uses e-learning for professional and personal development<sup>8</sup>, and it is used in the corporate world for training and product support. Because it is so commonplace, many human service department staff are likely to have already completed or been exposed to some form of e-learning.

One of e-learning's most attractive features is that it can accommodate each learner's environment, schedule and learning style. Training can take place at an individual work station, thereby avoiding ergonomic issues that might arise at alternate sites. E-learning courses can be scheduled to fit into individual schedules, and allow for interruptions with bookmarking, a feature that allows users to revert back to where she/he was previously working in the course material. E-learning courses can incorporate many types of media to engage trainees with different styles of learning.

E-learning brings consistency and fairness to training, as it ensures that the same subject content is delivered, within the same time frame, and uses the same scoring criteria for every enrollee. In addition, consistency can be established across e-learning courses if the agency develops best practices for course creation, teaching methods, testing, and evaluation, etc.

E-learning can result in more effective and efficient use of resources. Costs to maintain or reserve classroom space could be eliminated, as could costs for the time and mileage required to travel to offsite training locations. The impact of training on services to the community can be minimized if courses are staggered according to the unit and department needs. Staff personnel can also be freed up to apply more of their expertise to course improvement and coaching. A study comparing the learning outcomes and costs of various training methods resulted in similar outcome scores, but e-learning costs just 27%

of the cost of a live workshop<sup>9</sup>, in part because it takes less time.

For all of the above reasons, e-learning can be a useful tool to help staff keep pace with regulatory and technical changes which are occurring with increased frequency due to changing government priorities, court rulings, and fiscal realities.

## **Santa Cruz County's LMS implementation:**

### **CATALYST**

The catalyst for the implementation of e-learning in Santa Cruz County was the county

MEDS privacy and security agreement called for by the Medi-Cal All County Welfare Department Letter (ACWDL) 08-31. The California Department of Health Care Services, in order to comply with the federal Social Security Administration, itemized specific training requirements for all staff who administer the Medi-Cal program, as well as the maintenance and retention of these training records. Santa Cruz County decided that these requirements could best be satisfied with the implementation of a Learning Management System (LMS), for which they leveraged training funds to purchase.

### **LMS PROJECT**

In early 2009 Santa Cruz County contracted with BGI (Brisinger Group, Inc.) which offered an LMS that was affordable, provided flexibility for customization and was compatible with DotNetNuke (DNN). DNN compatibility was important because it was the internet platform upon which Santa Cruz County's Intranet site was based, and its functionality could be extended with third-party add-on modules. At the time, BGI was the only vendor offering this compatibility. Other features offered by BGI included:

- SCORM compliance;
- Ability to assign, track and grade courses;
- Support for self-paced delivery and bookmarking;
- Support for both mandated and optional training;

- Support for both e-learning and classroom training;
- Reporting customization and interface with SQL Server;
- Compatibility with Microsoft Active Directory and Outlook; and
- Ownership of customized source code.

An LMS Project charter was drawn up for the purpose of customizing the BGI product. Project members were drawn from within the county agency that had expertise in security, network, SQL server, DNN, operating system, and staff development. Priorities were quality, ease of use, access to reports, compatibility with existing systems, and flexibility. The project scope included the procurement of a “sandbox” testing environment for LMS development, with the final customized product to be installed, configured and administered by Santa Cruz County’s Information Technology (IT) and Staff Development units. The customization began in October 2009 with the goal of full implementation by June 2010. Santa Cruz County’s LMS project was defined by four phases:

- Phase One (09/09), the establishment of the project charter, the work schedule and BGI/IT agreements and proposals;
- Phase Two (10/09), the preparation of the LMS development environment and the test installation;
- Phase Three (10/09–01/10), the building and customization of the LMS by BGI and Santa Cruz County IT staff, in tandem;
- Phase Four (02/10–06/10), the user acceptance testing of the customized product.

Once the LMS was installed, the need for a separate authoring tool to develop e-learning courses became apparent. Santa Cruz County tested three products and decided on Adobe Captivate for its ease of use and vendor support. Initially, there was an issue uploading courses into the LMS because some course file elements were lost. This was resolved when the development team learned that e-learning courses must be produced with all files on a local desktop,

published, and then saved on the network. Files saved on the network before publishing would be dropped from the final product due to stringent network security. Santa Cruz County designated a media work station in the staff development unit for producing e-learning so that all files would be in a central location.

As the project moved toward the goal, there were some challenges. The plug-in that allows the LMS to authenticate users through the established logins and passwords failed to authenticate about 5% of the users (mostly managers). The LMS vendor failed to provide support during this period because it was going through reorganization. Santa Cruz County developed a workaround to deliver training to these individuals outside of the LMS, which they decided was more cost-effective than paying for a fix. Another criterion—registration for classroom training—was also not delivered.

Santa Cruz County met its June 2010 LMS implementation deadline and rolled out the MEDS Confidentiality training. Since then, they have also rolled out a three-part course on administering Disaster CalFresh, a Fraud course, and other courses in development. Some of the features incorporated included video, text-to-speech, and imbedded URL links. A challenge and goal is to develop more course authoring expertise among the trainers so that e-learning can be more widely applied in Santa Cruz County.

Santa Cruz County shared some lessons learned throughout their LMS implementation project. Their choice to own the source code has given them autonomy, proprietary rights, assurance of confidentiality and savings in maintenance fees, but it also has placed more demands on their IT and staff development units. Santa Cruz recommends careful contract itemization of expectations for upgrades (how many, how often) and support (how measured, how billed). It was important to identify the IT infrastructure that would be needed to support the LMS, such as band-width for multiple simultaneous users. Each work station needed Adobe Flash Player and speakers or head phones. In deploying e-learning courses

for the first time, county staff advises the use of small user groups who can identify bugs before wider use.

### **Applications for Sonoma County:**

Coincidentally, Sonoma County's Human Services Department was in the process of procuring an LMS during the same time period of this case study. Human resources department's unit was already using a management system geared for personnel and benefits, but it was limited in its capabilities for staff development. The staff development department determined that a more robust LMS was needed to handle their complex needs, including:

- Training
- Registration
- Online delivery of classes
- Participation by non-county employees
- Tracking of training

Like Santa Cruz County, Sonoma County's Human Service Department also experienced a fast approaching deadline to use funds that were available in the current fiscal year (2011-12). In the end, they were able to "piggy-back" on Alameda County's request for proposal with GeoMetrix Data Systems. This meant Sonoma County's essential function requirements could not vary from Alameda County's, but it allowed Sonoma County to bypass several steps in the procurement process. The proposal sped to the Board of Supervisors' April 2012 meeting and was approved.

E-learning can be a tool to help Sonoma County's Human Service Department keep pace with regulatory and technical changes because:

- Computers are already a part the current model;
- Many staff have already experienced some form of e-learning;
- E-learning can adapt to fit individual and department needs;
- E-Learning provides consistent content and evaluation;
- E-learning promotes the efficient use of material and human resources; and

- E-Learning can be used as a tool to keep pace with change.

Sonoma County's Human Services Department, with other California counties, will implement major changes in the coming months. Medi-Cal, the largest Human Services Department (HSD) program by case numbers (24,000+) and person count (45,000+), will experience a major reform in 2014 as the Affordable Care Act is implemented. Prior to 2014, the counties will be required to train staff to administer new programs, such as Healthy Families, and to retrain existing programs, such as for Cal-Fresh Semi-Annual Reporting. Department staff will need to learn how to use new CalWIN features, such as Web Enablement (2013), and our clients will be introduced to MyBenefits Portal (2012).

In conclusion, as these regulatory changes and technical improvements are automated in CalWIN, it would be ideal to deploy e-learning to demonstrate the new system windows and entries. E-learning could help to make these transitions more successful in terms of staff satisfaction (because employees would not be unprepared for process or system changes) and in terms of client satisfaction (because the county would be able to deliver the new programs or services). In addition, e-learning courses available on demand, as needed by staff, could result in improved program compliance. As more county human service departments implement e-learning, there will be enormous value in the formation of a library of SCORM compliant courses that can be shared, an idea put forth by former BASSC participants and by Santa Cruz County.

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