



**Executive Summary
of
A Statewide E-Learning Report
Findings from
the *Organizational Readiness (Director) Survey*
and the *Technical Capacity (IT Manager) Survey***

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EXECUTIVE SUMMARY

In 2008, California's Statewide Education and Training Committee (STEC) revisited plans for a statewide system to expand child welfare training beyond the classroom by utilizing various forms of electronic technology. Under the auspices of STEC, the e-Learning Committee was formed to facilitate the establishment of a statewide structure for sharing the development, production and delivery of child welfare training using electronic media. Members of the e-Learning Committee include representatives from the Regional Training Academies, the Inter-University Consortium, county child welfare departments, and other educational partners.

At its outset, the e-Learning Committee identified the need for a statewide baseline assessment to be conducted at the county level to determine organizational readiness and technical capacity for dissemination of child welfare training content through electronic media. Two surveys were developed for county child welfare agencies: (1) an organizational readiness survey for county child welfare directors (the "Director Survey"); and (2) a technical capacity survey for county-based information technologists (the "IT Manager Survey").

This Executive Summary highlights the main findings of each survey and provides recommendations for statewide strategic planning for achieving organizational readiness and building technical capacity for e-learning. Details regarding the implementation, results, and conclusions of the Director Survey and the IT Manager Survey are provided in the body of the report, accompanied by visual displays of data in charts and graphs.

ORGANIZATIONAL READINESS SURVEY (Director Survey)

Findings

The Director Survey comprehensively assessed the climate of 41 California county child welfare agencies with respect to introducing or expanding utilization of e-learning for the professional development of child welfare staff. County child welfare directors were queried about their interest, rationale and expectations for e-learning as a training method. They were also asked to indicate their preferences for course types, learning levels, and e-learning modalities. Directors' responses concerning agency learning environments,

allocation of staff time for e-learning, availability of technical support staff, and perceived challenges for implementation provided indications of agency conduciveness for e-learning.

- ***Directors strongly support e-learning as a staff development medium.***

Ninety-five percent (95%) of directors agreed or strongly agreed that child welfare staff could participate in e-learning for their professional development. Preference for e-learning to convey ongoing, specialized or advanced curricula was notable: Eighty-two percent (82%) of directors indicated high or very high interest for this application. Support for using e-learning to deliver the common core curricula was also substantial, with high or very high interest indicated by nearly half of the directors.

Seventy percent (70%) of directors rated the ability to offer e-learning courses at their agencies as highly important, and eighty-three percent (83%) expressed a high or very high commitment to realize this goal. Forty percent (40%) of directors indicated that their counties intended to offer e-learning courses within the next two years.

- ***Directors support substantial use of work time for e-learning courses.***

All responding directors supported the use of work time for e-learning courses, with approximately half favoring 1-2 hours of e-learning in a single day (51%), or 2-3 hours in a single week (49%). A majority of directors (68%) believed that e-learning would involve less time than classroom learning.

- ***Directors identify multiple benefits of e-learning.***

Cost savings in travel expenses, flexibility in scheduling, efficiency, convenience, and reductions in staff time away from the office were most frequently cited by directors as perceived benefits of e-learning. They also found in e-learning the ability to provide short, specialized trainings, and to disseminate information quickly.

Directors also expected e-learning to have a positive effect on staff development, by increasing the engagement of supervisors, improving the consistency and transfer of learning, and expanding opportunities for self-directed learning. Directors heavily endorsed e-learning as a means to transmit knowledge-based instruction, with eighty-five percent (85%) expressing high or very high interest in this usage. Skill-based instruction through e-learning was also highly rated by two-thirds of directors.

- *Directors favor facilitated group learning and interaction among learners.*

Group facilitated online courses and blended learning that combines classroom with online learning were the most preferred methods of e-learning delivery, with high or very high ratings noted by eighty percent (80%) and seventy-six percent (76%) of directors, respectively. Approximately two-thirds of directors also valued videoconferencing, self-paced online courses, and teleconferencing as delivery methods.

A preponderance of directors (93%) expressed the belief that effective e-learning would require interaction with a facilitator and with fellow trainees. Webinars™, teleconferencing, videoconferencing, and e-mail were the most popular methods indicated for such communications.

- *Directors envision an increased role for e-learning in the next five years.*

When asked to project into the future, nearly half of California's child welfare directors expected e-learning to play a significant role in staff development in the coming years. Several specified that e-learning would serve as a complement to classroom training and would provide more varieties in learning choices.

- *Directors indicate limited past and current usage of e-learning.*

For many counties, e-learning will be a new component in the working environment for management and staff, requiring accommodation in agency work routines and other modifications in existing cultures of learning. Despite their overall enthusiasm for e-learning, one-fourth of directors indicated that their counties had never delivered an e-learning course. In addition, of those that had, few courses were specifically targeted to child welfare staff.

- *Directors are somewhat hesitant about allocating technical support.*

Technical staff resources required for installation, maintenance, dissemination and troubleshooting related to e-learning may be underestimated for some counties, and may constitute a limiting factor in the scale of implementation. Many directors (42%) preferred to leave decisions regarding the extent of technical support for e-learning to their information technology ("IT") staff. More than one-third of directors (37%) indicated that they would allocate from 2-10 hours per week of IT staff time to assist with e-learning. Some counties did not have IT staff, and a small percentage (5%) was unable to allocate IT staff time to e-learning.

- *Directors believe that it is easy for staff to find a work space for e-learning, but harder to find time during the work day to take e-learning courses without being interrupted.*

Most directors (73%) believed that their staff would be able to find a physical workspace at the agency to participate in an e-learning course without being interrupted. However, in a separate question, fifty-six percent (56%) did not think that it would be easy for their staff to find a time during the workday when interruptions could be avoided. Directors thought that interruptions were more likely to come from colleagues (40%) than from supervisors (25%).

- *Directors' greatest concern for e-learning is ensuring staff participation.*

Ensuring staff participation (21 responses) along with its corollary, perceived reluctance among staff (4 responses), was the challenge most often cited by directors in relation to the implementation of e-learning. This finding suggests the need for agencies to encourage e-learning, and to establish supportive policies and procedures. Concern for ensuring the effectiveness of e-learning was also evident (8 responses), indicating that evaluations of e-learning at the county, regional and/or state level would be valued by agency directors.

Directors cited equipment challenges (8 responses) as a cause for concern, a finding that bolsters the need for sufficient technical expertise in the e-learning endeavor. Challenges related to 'start-up' were also noted. Start-up challenges would likely entail allocation of staff time, utilization of training and technical expertise, and other agency resources.

TECHNICAL CAPACITY SURVEY (IT Manager Survey)

Findings

The IT Manager survey comprehensively assessed the technical capacity of 42 California child welfare agencies. IT staff were queried about hardware, software and ancillary equipment related to participation in a statewide e-learning system.

- *IT staff support in child welfare agencies is limited.*

IT staff provide technical support to other departments in addition to child welfare departments (62%). There was a limited number of IT staff who provide technical support solely to child welfare departments (12%). Most county child welfare agencies reported having one IT staff person, although some larger

agencies reported having more than one IT staff person. Most of the technical support provided is related to the Internet, rather than e-learning.

As part of their duties, most IT staff reported having responsibility for 51 or more computers (78%). Among their responsibilities, IT staff indicated various modes for downloading software. More than half of IT staff (54%) download software onto computers and 31% reported that the installation of software is accomplished through auto-installation or update services.

- *E-mail and Internet access vary across the state.*

Staff receive county supplied e-mail accounts in all but one reporting county; they are allowed to send and receive e-mail and open attachments freely. Most workers access the Internet from a computer at their workstation (83%) and a smaller number access the Internet from a dedicated computer, used specifically for e-learning, or kiosk (14%). The most common form of Internet connection is the T1/T3 (83%).

- *E-mail security restrictions could impact e-learning.*

IT staff provided the following examples of email restrictions that could affect accessibility: 1) Courses originating from email addresses outside the county infrastructure may be blocked. The external e-mail addresses would need to be added to a safe list or be pre-approved. 2) Domain or extension names may also prevent access to courses. IT staff would need to make these domains and extensions accessible to staff. 3) Incoming e-mails and e-learning courses may be interpreted as SPAM and may need to be added to staff address books.

- *Internet Restrictions could impact e-learning.*

IT staff cited restrictions regarding the Internet domain, category or site as potential hindrances to accessing e-learning courses. In addition, they stated that users may encounter pop-ups and may also need to disable cookies in order to participate in e-learning. Fifty-seven percent (57%) of responding counties reported that pop-ups are blocked but can be overridden at the user level.

A promising finding is that ten of the nineteen dedicated counties that completed the survey reported having a parallel computer system. A parallel computer system may surmount limitations of the dedicated system, such as lack of Internet access. However, further investigation is needed to determine the full capacity of the parallel computer system as a viable option for e-learning.

- *The ability to hear sound in e-learning courses varies across the state.*

At the present time, access to sound components in e-learning courses is limited across the state. Thirty-six percent (36%) of responding counties do not have plug-in outlets for earphones, and only 23% of counties have internal speakers. Additionally, 33% of responding counties reported that none of their computers have sound cards which are required for e-learning with an audio component.

- *The ability to view video components in e-learning courses is limited across the state.*

Most responding counties have graphic cards (93%) that enable users to see basic computer graphics like static clip art, animation and animated clip art. However, macromedia flash is unavailable in 55% of responding counties, posing a barrier for viewing more integrated and high level video components like video clips and streaming video. County ability to access and view video components in e-learning courses may be compromised if users do not have Windows Media Player and Real Player, or if these software packages are not activated.

- *Software compatibility varies in the state.*

All responding counties reported having access to Microsoft Word and Excel. Counties with different versions of Microsoft Word may encounter access and viewing problems when opening Word documents. For example, if a document is created in Word 2007 or higher, a county with Word 2003 will not be able to convert or access the document. All responding counties reported using some version of Internet Explorer as their default Internet browser. Regarding participation in e-learning activities, newer versions of Internet browsers are more stable than earlier versions. Seventy-four percent (74%) of responding counties have access to the Adobe Acrobat document reader. A document reader is needed in all counties as this method is a universal standard for viewing documents in an Internet environment.

- *A variety of platforms are used in California to access e-learning.*

Thirteen counties responded to the question about the learning management system used in their county. The following learning management systems were identified: BGI SCORM, SUM Total, Trilogy, Pathlore, Saba, Cornerstone, and Pathways. It is uncertain if there are other learning management systems used throughout the state. Further investigation may determine the full capacity of the state's counties to completely participate in e-learning.

- *Staff with disabilities may require accommodations for accessing e-learning.* Twelve (12) counties reported that they employ staff with visual disabilities; twelve (12) counties reported that they employ staff with hearing-related disabilities, and fourteen (14) counties reported that they employ staff with mobility-related disabilities.

OVERALL RECOMMENDATIONS

At the state level, support will be needed to build a coordinated infrastructure utilizing human resources and technical components to promote the production, delivery and management of e-learning courses on a statewide scale. The following recommendations apply to California's child welfare training system as a whole.

1. Support staff development of trainers while creating a new culture of learning for trainees.

With increased utilization of e-learning, trainers will continue to play an active role in the realm of child welfare staff development. In particular, findings that indicated a preference for interactive and facilitated training delivery methods demonstrate that trainers will be needed to support a multitude of e-learning training modalities, including the most preferred online and blended courses.

Trainers and writers will need to develop skills related to the conversion of existing written curricula to electronic formats, development of new electronic curricula, and training delivery involving interactive methods that encourage communication between facilitators and trainees, and among fellow learners. Additionally, a new or expanded reliance on Webinars™, teleconferencing, and videoconferencing for internal communications related to e-learning courses will alter the scope, tenor and current routines of training staff and training participants. Trainings for trainers related to various modalities of e-learning will need to be introduced and expanded in the statewide child welfare system training system of the future.

At the state, regional, and county levels, some re-configuration of training division resources will be needed to accommodate expansion of staff skill sets for the development, production, delivery and management of e-learning. Commensurate to technical infrastructure needed for electronic teaching methods, a staff infrastructure also needs to be developed throughout the

child welfare training system. Also, endorsement of e-learning emanating from the state level would assist in establishing a climate supportive to statewide implementation.

2. Establish plans for evaluation of e-learning courses commensurate to those used for written curricula and classroom training.

Based on directors' concerns for ensuring the effectiveness of e-learning, state, regional, and county agencies should establish or build upon existing evaluation frameworks for e-learning courses. Evaluation priorities should be determined, and provision should be made to share effective evaluation strategies and research findings throughout the state.

3. Continue to develop e-learning partnerships.

Counties have already begun to partner with their regional training academies, public colleges and universities, and service agencies for delivery of e-learning instruction. Increasing the use of partnerships to produce and distribute e-learning courses, whether at the state, regional, or county level, will allow for increased cost effectiveness, capacity-building, and interagency coordination that will provide overall benefits to child welfare education, training and practice.

4. Counties and/or the state should establish organizational capacity and technical capacity policies and procedures that encourage and ensure participation in e-learning courses.

Organizational Capacity Policies and Procedures

Forty percent (40%) of directors indicated their intent to offer e-learning courses within the next two years. County management should consider how the introduction of e-learning in their local training system might modify their learning culture. For example, work routines, interactivity with other learners, supervision, transfer of learning practices, and workspace utilization could all be affected. Setting a tone of encouragement for e-learning substantiated by supportive policies, standards, and procedures would assist with successful implementation of e-learning at the county level and the establishment of agency environments conducive to e-learning.

Technical Capacity Policies and Procedures

Dedicated counties have different technical capacity issues compared to coexistent counties. Therefore, establishing policies and procedures for technical aspects of e-learning would ensure uniform access across the state.

Technical policies may include guidelines for staff responsibilities and procedures for addressing technical issues. A statewide policy that addresses varied technical capacity may be needed for dedicated counties. County policy may be needed for coexistent counties. The guidelines would address:

- a. Downloading software related to accessing e-learning courses
- b. Disabling pop-ups and cookies for the purposes of e-learning
- c. Identifying incoming emails, courses, web links, websites, and resources related to e-learning.
- d. Decreasing or removing Internet restrictions (domain/extension, category, or site type) so that county users can access e-learning courses.
- e. Specifying allowable file format types for importing and exporting data into learning management systems.
- f. Specifying unique identifiers for importing and exporting data into learning management systems.

5. Develop the skills of current IT staff or hire more IT staff with e-learning knowledge and skills.

Child welfare agencies would benefit by having more IT staff providing e-learning support. If counties are unable to hire additional IT staff with e-learning knowledge and experience, they may also benefit by developing the skills and knowledge of current staff. Counties should also consider allocating IT staff exclusively to the CWS agency, in order to provide more specialized support for e-learning.

6. Provide accommodations for staff with disabilities.

Agencies reported that some staff have disabilities relevant to e-learning. Staff may require special accommodations to be able to fully participate in e-learning activities.

7. Continue to provide a variety of options for accessing the Internet for the purpose of taking e-learning courses.

Options could include:

- a. Staff computers
- b. Dedicated computers
- c. Computer labs
- d. Other designated areas or agencies/organizations

8. Acquire a document reader for word processing and PowerPoint.

Many e-learning documents and course materials are in a pdf format, which requires a portable document reader. All counties will need a portable document reader or free software (Adobe, Foxit, or another reader) to access documents in this format.

Some courses may be PowerPoint based or contain PowerPoint files in them. Some counties do not have PowerPoint. A PowerPoint reader (PowerPoint Viewer 2007) would allow counties to view PowerPoint files.

9. Fully investigate the technical capacity of the dedicated counties to participate in e-learning.

Nineteen of out of the 34 dedicated counties completed the IT Manager Survey. Ten of these counties have a parallel computer system. A statewide supported pilot to investigate technical capacity in dedicated counties with and without parallel computer systems would allow for a more robust analysis of the technical capacity of the state. The pilot would also help to inform the implementation of e-learning as outlined in the e-learning strategic plan.

10. Consider e-learning capacity when making technical/computer upgrades.

Technology changes rapidly. Ongoing upgrades will be necessary to keep pace with innovations that affect e-learning in the child welfare profession. One major consideration is the maintenance of a reinforced bandwidth infrastructure for large scale deployment of e-learning.

Survey results indicated that upgrades were currently needed for several technical components of e-learning, including:

- a. Bandwidth
- b. Operating system
- c. Microsoft Office suite
- d. Internet connection
- e. Internet browser
- f. RAM
- g. Sound cards, plug-in device for speakers, speakers, and/or earphones
- h. Video

11. Make investments in SCORM compliant learning management systems or content management systems.

In order to establish and develop the statewide library outlined in the strategic plan, child welfare staff across the state must be able to access a SCORM compliant content management system or learning management system. The SCORM standard is necessary in order to share and post courses for user access.

Counties and regions are also advised to consider differences between a content management system and a learning management system. A content management system does not have an integrated component to track training. An integrated tracking component will allow users, counties, RTAs and the state access to trainee records and reports with relative ease.

If regional training academies do not have a SCORM compliant content management system or learning management system, a central learning management system will be essential to enable users in all regions and counties to access e-learning courses via a central platform.

CONCLUSION

In conclusion, establishing a coordinated, integrated and fully accessible statewide system for e-learning in child welfare will strengthen a culture of continuous learning for the professional development of child welfare staff in the state of California.