



# Statewide E-Learning: *Content Guidelines* and *Technical Standards*



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## **Guidelines for Content Development**



**Statewide Training and Education Committee (STEC)  
Subcommittee on e-Learning**

**April 26, 2010**

## PURPOSE

This document provides general guidelines for content experts who are developing e-learning courses for statewide use. The guidelines are based on sections of the *Strategic Plan for e-Learning in California's Child Welfare Training System* (2009): 'Content Standards and Values' (Decision Point #5) and 'Requirements for Completion' (Decision Point #8). Additional guidance for *Content Form and Structure*, and *Content Components* are also included.

## CONTENT STANDARDS

- E-learning content promotes professional development in child welfare practice.
- E-learning content supports the following themes of child welfare practice in California, as applicable to the topic area:
  - Outcomes-informed practice;
  - Evidence-based practice (information regarding promising practices or best practices shall be provided if research is insufficient or not available);
  - Strength-based practice;
  - Family and youth engagement; and
  - Fairness and equity
- Existing curricula will be used as foundations for e-learning products, when possible.
- E-learning content is based on measurable learning objectives that allow for the evaluation of knowledge, skills, and/or values.
  - Models for content standards include:
    - The learning objectives, competencies, and curricula of the Common Core
    - Learning objectives developed by the regional training academies and the IUC/LA-DCFS for ongoing and advanced trainings
- E-learning content aligns with BSW IV-E and MSW IV-E competencies along a continuum of professional education and training.
- E-learning content applies transfer of learning principles and strategies.
- E-learning content includes interactive components to engage the e-learner.

- The e-learning development process draws upon the combined expertise of practitioners, university partners, and technical experts.
- Content standards may be modified in specific cases when such modification is necessary to meet technical requirements for content or delivery.

## CONTENT VALUES

- E-learning content is grounded in social work values and ethics.<sup>1</sup>
- E-learning supports the application of best practices aimed at improving outcomes for children and families.
- E-learning content builds upon current training resources and existing training structures whenever possible.
- E-learning endorses training strategies that progress from knowledge acquisition to skill-building.
- E-learning encourages flexible design, formats, and delivery to assist counties in meeting identified training needs.
- E-learning standards for in-service training are consistent with educational standards endorsed by California's Title IV-E university programs for the bachelor's and master's degrees in social work.
- Community partners are encouraged to participate in relevant e-learning opportunities whenever possible.

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<sup>1</sup> The National Association of Social Workers (NASW) Code of Ethics states, "Social work administrators and supervisors should take reasonable steps to provide or arrange for continuing education and staff development for all staff for whom they are responsible. Continuing education and staff development should address current knowledge and emerging developments related to social work practice and ethics." (NASW Code of Ethics, Section 3.08 Continuing Education and Staff Development, <http://www.socialworkers.org/pubs/code/code.asp>, retrieved 8/5/09).

CalSWEC's Standards and Values support the use of ongoing training as a form of best practices: "No standards of practice are final. Standards must be subject to continuous review and revision, in view of the constantly growing knowledge about children, human behavior, and human ills." (CalSWEC Website)

[http://calswec.berkeley.edu/CalSWEC/CalSWEC\\_Values.html](http://calswec.berkeley.edu/CalSWEC/CalSWEC_Values.html) and  
[http://calswec.berkeley.edu/CalSWEC/CalSWEC\\_Standards.html](http://calswec.berkeley.edu/CalSWEC/CalSWEC_Standards.html)

## CONTENT FORM AND STRUCTURE

### 1. *Training modalities*

The form and structure of curricula should be customized to promote knowledge and skills acquisition, and to maximize access to learning opportunities. Examples of training modalities that trainers may consider include: 1) individualized self-paced learning, 2) group facilitated learning, 3) blended learning, 4) teleconferencing, 5) video conferencing, and 6) viewing of CDs/DVDs.

#### Example 1

- Blended course: A portion of curriculum may be best taught in a classroom while other parts of the same curriculum can be taught effectively online.

#### Example 2

- Individualized self-paced course: A new agency policy can be taught effectively online.

#### Example 3

- CD/DVD: A short course may include interactive components and activities.

### 2. *Appropriateness of material for e-learning*

- a. The broad topic area is suitable to an e-learning environment. For example, emotionally charged subjects (e.g., child sexual abuse or cultural competence) may require in-person interaction with an instructor and/or colleagues. Topics that pertain to specialized skills (e.g., SDM Assessment Tools) may also be conveyed better in a traditional classroom than in an e-learning environment.
- b. The specific content is suitable to an e-learning environment (same as above).

### 3. *Clarity*

- a. Content can be easily read and understood.
- b. Instructions and directions can be easily read and understood.
- c. Picture, images, objects, icons, etc. are clearly visible.

### 4. *Duration*

- a. Duration is sufficient to address the learning objectives of the course.
  - b. Duration does not exceed a normative attention span for the particular mode of e-learning employed (i.e., courses with video, audio and/or other interactive activities may support a longer attention span because of their interactive nature).
  - c. Duration reflects consideration of the work schedules and time commitments of the intended audience.
- 5. *Pacing*
  - a. Pacing is attentive to:
    - i. Gauging the knowledge and skills of the intended audience
    - ii. The amount of information being conveyed
    - iii. The complexity of the concepts or skills
    - iv. The impact of the material
    - v. Maximizing the engagement of the participant by utilizing a variety of instructional methods
- 6. *Volume of materials*
  - a. The amount of information is reasonable for the intended duration
  - b. Information in excess of the intended duration may be designated as supplemental materials, reference materials, or on-the-job aids
- 7. *Integration of components*
  - a. The course is easy to navigate
  - b. Components are easily accessed and activated
  - c. Access to components follows a logical, systematic structure
  - d. Components are situated within the course to enhance comprehension and engagement
- 8. *Trackable evidence of course completion*
  - a. Evidence of satisfactory completion of an e-learning course will be provided through:
    - i. Embedded 'completion items' within the course structure that require periodic user responses that can be tracked; and/or
    - ii. A trackable post-test.
    - iii. For CEU credits, a post-test with a cut-off score is required by the Board of Behavioral Sciences.

## CONTENT COMPONENTS

*(required components are indicated)*

All e-learning courses must contain 1) an agenda, 2) competencies and 3) learning objectives and 4) may contain one or more of the following:

- a. Course evaluation
- b. Resources
- c. Links
- d. Attachments and supplemental materials
- e. Printable reference list
- f. Audio (with printable script)
- g. Video (with printable script)
- h. Online interactive activities, not limited to:
  - Chat
  - Forums
  - Wikis
  - Quizzes
  - Knowledge checks
  - Trackable completion items or a trackable post-test (*required*). A cut-off score is *required* for the course to qualify for BBS CEU credits
  - Case studies
  - Demonstrations
  - Stories
  - Vignettes
  - Fill in the blank
  - Dragging and dropping
  - Matching
  - Treasure hunt
  - Internet Search
  - Bingo
  - Group activities
  - Cross-regional discussion, and other Interactive activities

NOTE: Using activities in e-learning courses may impact county bandwidth. Course developers should use interactive activities prudently to create learning opportunities that enhance the course.



## Technical and Computer Requirements for End-Users and Course Developers



July 13, 2010

## INTRODUCTION

This document indicates the minimum technical and computer requirements for the statewide sharing of e-learning courses. The intent of this document is to provide technical guidelines to end-users and provide technical guidelines for e-learning course development, course revisions, and course editing for e-learning course developers. Section one is intended and geared towards end users and section two is intended and geared towards e-learning course developers. This document includes recommendations for regions and counties with limited technical capacity as well as suggestions for regions and counties with a more robust technical infrastructure.

This document was created with the understanding that counties and regional training academies may have different computer specifications and technical infrastructures. In order to maximize collaboration and sharing of courses, those regional training academies with an existing SCORM compliant content management system (CMS) or learning management system (LMS) will be able to participate directly through their regions. Regional training academies without a content management system or learning management system may participate by taking courses posted on a central platform.

Technology advances will likely drive the future direction of e-learning courses. The need for computer and technical upgrades may be necessary to keep pace with current trends. Therefore, counties and regional training academies may consider the purchase of computers, computer equipment, software, hardware, and other ancillary equipment in future organizational development plans. This is a living document; as such, requirements can change or may have changed since the printing of this document (July 2010).

## SECTION I: TECHNICAL/COMPUTER REQUIREMENTS FOR END USERS

The information contained in this section is intended for e-learning end users.

*To take a course from the statewide e-learning library, you will need:*

### **1. Internet Connection**

Access to a computer with a high-speed Internet connection. The recommended high speed connection is one of the following options:

- a. Fiber
- b. Broadband (EPL)/10MBPS or higher
- c. T1, T4
- d. DSL

### **2. Internet Browser**

Microsoft Internet Explorer: version 7, 8 or higher.

### **3. Operating System**

The recommended operating system is one of the following options:

- a. Microsoft 2000
- b. Microsoft XP (Service Pack (SP) 3)
- c. Microsoft Vista
- d. Windows 7

### **4. Monitor Size**

The recommended monitor size is one of the following options:

- a. Desktops – 15 inches and higher
- b. Laptops – 13 inches and 15 inches

### **5. Screen Resolution**

The higher the screen resolution, the better the viewing quality will be.

- a. 800 X 600 or higher

### **6. Word Processing**

Microsoft Word, version 2003 or higher<sup>2</sup>

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<sup>2</sup> It is recommended that end users have Word 2003 or higher to view documents in e-learning courses. Course developers should develop courses in Word 2003. Course developers should

## **7. Document Reader**

Portable Document formats (pdfs) may be used in e-learning courses. The recommended pdf reader is one of the following options:

- a. *Adobe Reader*. If your computer does not have Adobe Reader, you can download the most current version at: <http://get.adobe.com/reader/>. If you do not have permission to download Adobe Reader, contact IT staff in your county for assistance.
- b. *Foxit Reader, version 3.3*. Foxit can be downloaded for free at <http://www.foxitsoftware.com/pdf/reader/>.

## **8. Memory**

The recommended RAM is one of the following options<sup>3</sup>:

- a. 256 MB
- b. 512MB
- c. 2 GB or higher

## **9. Email Account**

- a. County supplied email address or
- b. County approved alternate email address

## **10. Counties that Are Able to Hear and Access Audio**

must have a sound card and at least one of the following:

- a. Integrated speakers
- b. Plug-in speakers
- c. Ear phones

## **11. Counties that Are Able to View and Access Video and Animated Graphics**

must have at least one of the following:

- a. Real player
- b. Windows media player
- c. Java
- d. Flash 7 or higher

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not create Word documents in later versions of Microsoft Word because users may not be able to access them.

<sup>3</sup> Memory is used when multiple programs are open at the same time. It is recommended that an end user closes all other applications (outlook, Word, Excel, etc. ) when taking an e-learning course.

NOTE: E-learning courses may use different versions of flash. You may receive a message that you a more current version of flash is required to access a course. You may need to download the flash software if your computer does not have the necessary version. If you do not have permission to download software, contact IT staff in your county for assistance.

## **12. Internet Options: Cookies**

Most computers have cookies enabled. When cookies are enabled, websites are able to track usage, pages visited, and interactivity on their website. If users return to the website, the website can recognize the user's computer and preferences. Cookies may need to be enabled to view some e-learning courses.

Caution: Check your county policy about enabling cookies. If you do not have permission to enable cookies, contact the IT staff in your county for assistance.

To enable cookies, follow the directions below:

- a. To enable cookies for Internet Explorer, version 8:
  - i. Click the **Tools** menu
  - ii. Click **Internet Options**
  - iii. Click on the **Privacy** Tab
  - iv. There are two options for handling cookies: 1) Automatically by setting the slider button to your specifications and 2) Manually by restricting the sites that you allow or disallow.
    1. To enable cookies automatically, place the slider button on one of the following options:
      - a. Accept all Cookies
      - b. Low
      - c. Medium
      - d. Medium High
      - e. High
      - f. Block all Cookies
    2. To enable cookies manually
      - a. Click the sites button
      - b. Type the name of the website into the box that says, "Address of website"
      - c. Click the Allow button

Note: The website appears in the manage websites.  
You can add multiple websites.

- v. Click OK
- b. To enable cookies for Internet Explorer, version 7:
  - i. Click the **Tools** menu
  - ii. Click **Internet Options**
  - iii. Click onto the **Privacy** Tab
  - iv. Click the Sites button (another window will open)
  - v. You can specify which websites are allowed to use cookies
    - 1. Type the name of the website into the box that says, "Address" of website
      - a. Click the button that says allow
      - b. Click OK
- c. To enable cookies for Internet Explorer, version 6:
  - i. Click the **Tools** menu
  - ii. Click **Internet Options**
  - iii. Click onto the **Privacy** Tab
  - iv. Move the slider button to a level that is below medium high (i.e. medium, low, accept all cookies)
  - v. Click OK

### **13. Internet Options: Pop-ups**

The World Wide Web uses pop-up ads to attract users to other web pages. It is a form of online advertisement, intended to entice users to go to different locations on the web. Pop-up blockers prevents pop-ups from appearing. Some computers may recognize an e-learning course as a pop up. Users may have to manually allow access to an e-learning course. To set the pop-up blocker in Internet Explorer to your specifications:

- a. Click the **Tools** menu
- b. Point to **Pop-up Blocker**
  - i. Select **Pop-up Blocker Settings**
- c. Type the address(es) into the **Address of website to allow** field
  - vi. This address may be a regional training academy website or a supported content management system or learning management system.
- d. Click **Close**

Note: There is an option to temporarily allow a website to display a pop-up. Click the *Information Bar* when it notifies you that a pop-up has been blocked.

#### **14. Internet Options: Javascript**

Computers should be Javascript enabled. Check your county policy about enabling Javascript. If you do not have permission to enable Javascript, contact the IT staff in your county for assistance

## **SECTION II: TECHNICAL/COMPUTER REQUIREMENTS FOR COURSE DEVELOPERS**

The information contained in this section is intended for those will be creating, editing, and modifying e-learning courses.

### **1. Creating Documents in Microsoft Word 2003**

- E-learning courses that have word processing documents should be created using Microsoft Word, 2003 or
- E-learning courses that have word processing documents can be created with a later version of Microsoft Word (2007). The Word documents **MUST** be converted to a 2003 format.
- Microsoft word documents can be converted to .pdf files for viewing purposes only.

### **2. Using Sound in E-Learning Courses**

The use of sound in e-learning courses is acceptable. However, it should be noted that sound could impact end users' ability to view and progress through courses, particularly if counties do not have robust technical capacity<sup>4</sup>. Developers should be aware that some counties/regions may not be able to hear sound. Developers may consider building in other engaging activities to make courses more interactive. If sound is used in an e-learning course, a printable script **MUST** accompany the course and the end user must be able to access the script easily.

**NOTE:** The use of sound in e-courses is increasing. A significant number of courses use sound as a standard learning tool. RTAs, regions and counties may consider future computer and technical upgrades to include sound as a universal teaching and learning tool.

### **3. Using Video in E-Learning Courses**

The use of video in e-learning courses is acceptable. However, it should be noted that video could severely impact end users' ability to view and progress through courses. Video can also impact county ability to deliver courses through an existing broadband system, particularly if counties do not

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<sup>4</sup> E-learning courses that are developed for county/RTA only may use sound in courses that meet their needs



have robust technical capacity<sup>5</sup>. Developers should be aware that some counties/regions may not be able to view video. Developers may consider building in other interactive and engaging activities. If video is used in an e-learning course, a printable script that is formatted by segment MUST accompany the course and the end user must be able to access the script easily.

NOTE: The use of video in e-courses is increasing. Some courses use video as a standard learning tool. RTAs, regions and counties may consider the use of brief video clips that enhance or facilitate learning. RTAs, regions, and counties may also consider future computer and technical upgrades to include video as a teaching and learning tool. For example, video can be used as vignettes, coaching tools, student feedback, etc.

#### **4. Course Naming Conventions**

CalSWEC uses the following naming conventions:

- The proper name of the course
- The version of the course
- All e-learning courses should be easily recognized by the name of the course. The name of the SCORM zipped folder should be the same name as the course. The naming process occurs when the course is developed by the developer.

NOTE: The current versioning system includes:

Major curriculum revisions – version 1, version 2, version 3, version 4

- Increase version by one point each time revisions to competencies and curriculum are made
- Increase version by one point each time revisions to learning objectives and curriculum are made
- Increase version by one point each time significant content revisions are made
- Increase version by one point each time it is recommended or suggested by STEC or CDOG
- Increase version by one point each time changes are made based on the results of training evaluation data

Minor curriculum revisions - version 1.1, 1.2, 1.3, version 2.1, 2.2, 2.3

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<sup>5</sup> E-learning courses that are developed for county/RTA only may use video in courses that meet their needs

- Increase version by 1/10<sup>th</sup> of a decimal point each time small changes to curriculum are made (formatting and content)
- Increase version by 1/10<sup>th</sup> of a decimal point each time data updates/revisions are made
- Increase version by 1/10<sup>th</sup> of a decimal point each time changes/updates to laws, initiatives, and policies are made
- Increase version by one point each time it is recommended or suggested by STEC, CDOG, or e-learning committee
- Increase version by 1/10<sup>th</sup> of a decimal point each time changes are made based on the results of training evaluation data

Example: Impact of Domestic Violence on Children, v1

Example: Genogram Training, v2

Example: Person Centered Planning, v1.2

Example: Civil Right, v2.3

## **5. Course Packaging Requirements**

All courses must be contained in one SCORM zipped folder. All of the components (manifest file, links, supplemental materials, graphics, documents, pdfs, PowerPoint presentations, activities, tests, polls, etc.) of the course must be contained in the one SCORM zipped folder. Courses that require final editing and formatting should not be packaged into a SCORM zipped folder. All of the components of the course should be sent to CalSWEC, who will consult with the course developers, e-learning committee and statewide partners, for final editing and packaging of the course.

The current standard for SCORM is 1.2 or 1.3 (commonly known as SCORM 2004).

## **6. Course Authoring Software Requirements**

Courses developed for the statewide library should use the following recommended software:

- Any course authoring software that can be compressed and packaged into a SCORM zipped folder. However, Articulate, Captivate and Toolbook are the preferred software packages. (See course naming conventions and course packaging requirements.)

## **7. Course Transfer Standards**

Courses developed for the statewide library should use the following course transfer process:

- a. **File transfer site (FTP):** E-learning courses must be 10GB or smaller to be transferred via a file transfer site. E-learning courses should be sent to CalSWEC. CalSWEC will post courses on the file transfer site and notify regional representatives when courses are available for download to their respective regional training academies.
- b. **DVD:** E-learning courses must be 4.5 GB or smaller to fit on a DVD. CalSWEC will be responsible for sending DVDs to Regional Training Academy contact persons.
- c. **CD:** E-learning courses must be 780 MB or smaller to fit on a CD. CalSWEC will be responsible for sending CDs to Regional Training Academy contact persons.

NOTE: Some regions may not be able to send zipped folders via email; therefore, it was not included as a method for transferring files.

## 8. Course Components

All e-learning courses must contain 1) an agenda, 2) competencies and 3) learning objectives and 4) may contain one or more of the following:

- a. Course evaluation
- b. Resources
- c. Links
- d. Attachments and supplemental materials
- e. Printable reference list
- f. Audio (with printable script)
- g. Video (with printable script)
- h. Online interactive activities, not limited to:
  - Chat
  - Forums
  - Wikis
  - Quizzes
  - Knowledge checks
  - Trackable completion items or a trackable post-test (*required*). A cut-off score is *required* for the course to qualify for BBS CEU credits
  - Case studies
  - Demonstrations
  - Stories
  - Vignettes
  - Fill in the blank
  - Dragging and dropping
  - Matching

- Treasure hunt
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NOTE: Using activities in e-learning courses may impact county bandwidth. Course developers should use interactive activities prudently to create learning opportunities that enhance the course.