

Success In Accessible E-Learning

Hot Topics in E-Learning Accessibility

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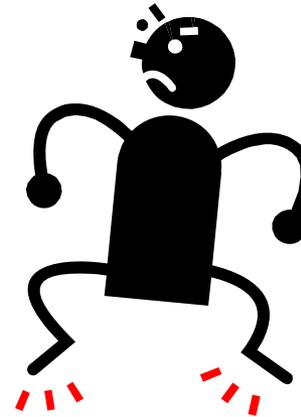
E-learning comprises all forms of electronically supported learning and teaching. - Wikipedia

Synonyms:

- WBT (Web-based training)
- CBT (Computer Based Training)

E-Learning Technologies:

- *Document:*
 - Microsoft Word Document
 - Adobe PDF
- *Web Delivery (Classic)*
 - Lectora
 - Dreamweaver
 - Articulate
 - Captivate
- *Presentation Tools*
 - PowerPoint
 - IBM Symphony
- *Live Presentation Tools*
 - Talking Communities
 - WebX
 - GoToMeeting
- *Video*



Instructional Designer

VS

Accessibility Advocate



Buy-in (Principles)

Key Concepts In E-Learning
Development (Practical Application)



- Section 508
 - Federal Government Purchasing Only
 - Often Sited by Other Entities
- Texas Administrative Code
 - Texas Government Only
 - TAC 206
 - TAC 213
- Americans with Disabilities Act (ADA)

Weak Motivators



Goal of Instructional Design: To create the most effective training strategies and materials to create a behavioral change in a target audience.

Best Materials for Audience

1. My target audience can't have blind people.
2. I don't want to reduce my training materials to the lowest common denominator.
I don't want to make mediocre training to facilitate accessibility.
We can't teach everyone, need to concentrate on the majority.
3. I don't have the budget to add accessibility. (Future Topic)



Target Audience Fallacy: There are no blind (“impaired”) learners in the target audience.

- Unanticipated Secondary Learners
 - Tangential Learners: Support Staff, Administration
 - Portability: Training is Shared Amongst Organizations
 - LMS Open to Self Registration: Outside the Organization

- Too Narrow Definition for Accessibility:
 - Four Accessibility Groups:
 - Vision (Blind, Low Vision, Color Blind)
 - Hearing
 - Mobility
 - Cognitive
 - Benefits Learners in General
 - Aging Workforce
 - Examples: Color Contrast, Scaling, CC

Lead with a discussion of color and contrast!

More About Color and Contrast

Tools:

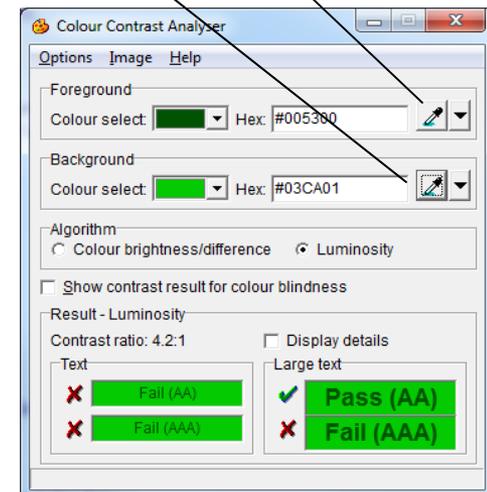
- WAT-C toolbar for IE
<http://www.wat-c.org>
- <http://juicystudio.com>

Guidelines

- Web Content Accessibility Guidelines (WCAG) 2.0
 - <http://www.w3.org/TR/WCAG/>
 - 1.4.3 Contrast
- www.webaim.org

Conversation (Target Audience)

- Aging Workforce
- Low Vision
- Higher Levels of Learning Reduced Eye Fatigue
- Doesn't Affect Scope, Time, Cost





I don't want to reduce my training materials to the lowest common denominator.

- Lack of Accessibility Knowledge
 - Training profession is focused on processes (like ADDIE) that have not been extended to include accessibility.
 - Stakeholders
 - Project Managers
 - Instructional Designers
 - Subject Matter Experts (SME)
 - Rich Asset Specialists (Video / Audio)
 - E-Learning Developers
 - Content Entry Staff
 - It's hard to find decent information on E-Learning accessibility.
 - Very Tool Dependent
 - Focus on Technical over Usability
- Perception that accessible materials have to look boring.



Completion Indicator

Chapter /
Page Title

Content

Chapter 1: Introduction to DSHS Emergency Management in Texas Training Course Page 3 of 3

Course Goal

The goal of this training is to set expectations and facilitate a sense of reassurance for DSHS employees should they be called to activation after a disaster event in Texas.

[View Course Objectives](#)



By the end of this course you will be able to answer the following questions:

- Can you explain the Commissioner's Directive and the Operational Support Policy?
- What is the Emergency Management in Texas response structure?
- Do you know what to expect when you are called to respond to a disaster or threat in Texas?
- Can you break down the functions of the SOC and DSHS MACC?

By the end of this course you'll be able to answer all of these questions.

 **EXIT** **MAIN MENU** **RESOURCES** **HELP**     **BACK** **NEXT**

Audio Narration:
* Closed Captioning

**ID Features

Audio Controls

Navigation



Completion Indicator

Chapter /
Page Title

Content

Chapter 1: Introduction to DSHS Emergency Management in Texas Training Course Page 3 of 3

Course Goal

The goal of this training is to set expectations and for a sense of reassurance for DSHS employees should they be in a situation after a disaster event in Texas.

[View Course Objectives](#)



By the end of this course you will be able to answer the following questions:

- Can you explain the National Support Policy?
- What is the organizational structure?
- Do you know how to respond to a disaster or threat in Texas?
- Can you identify the roles and responsibilities of DSHS MACC?

By the end of this course you'll be able to answer all of these questions.

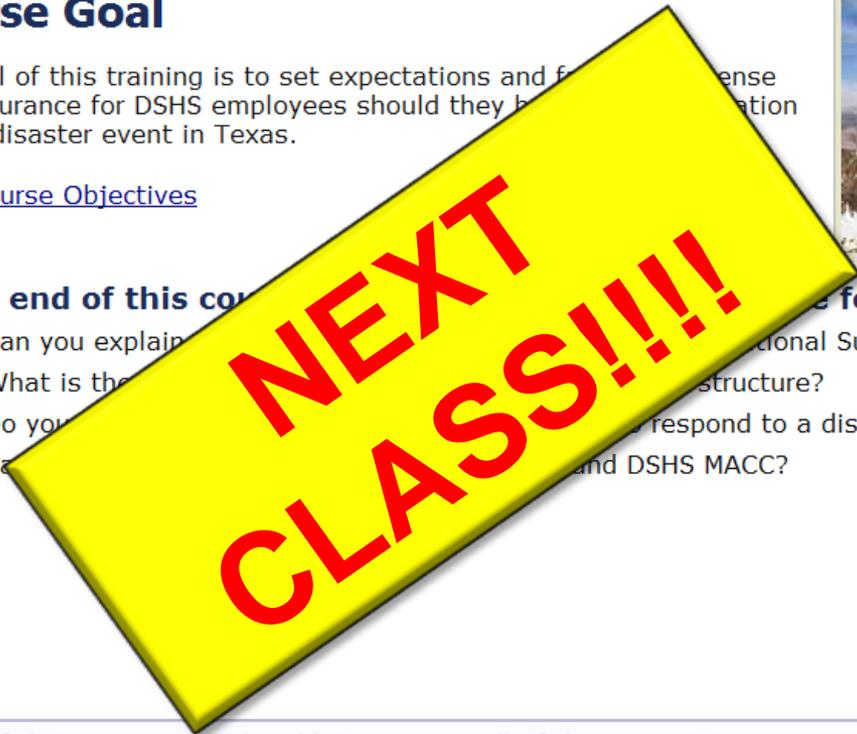
 **EXIT** **MAIN MENU** **RESOURCES** **HELP**     **BACK** **NEXT**

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Universal Design

Create one of something that accommodates everyone.

VS

Instructional Design

Create the materials that make a change in the target audience to the exclusion of all other audiences.



Universal Design

Accessibility should be planned and implemented in the beginning.

Baked In *not* Bolted On

VS

Instructional Design

Create the materials that make a change in the true target audience which will include blind, low vision, Deaf and mobility impaired.

You don't get to pick and choose aspects of your learners.



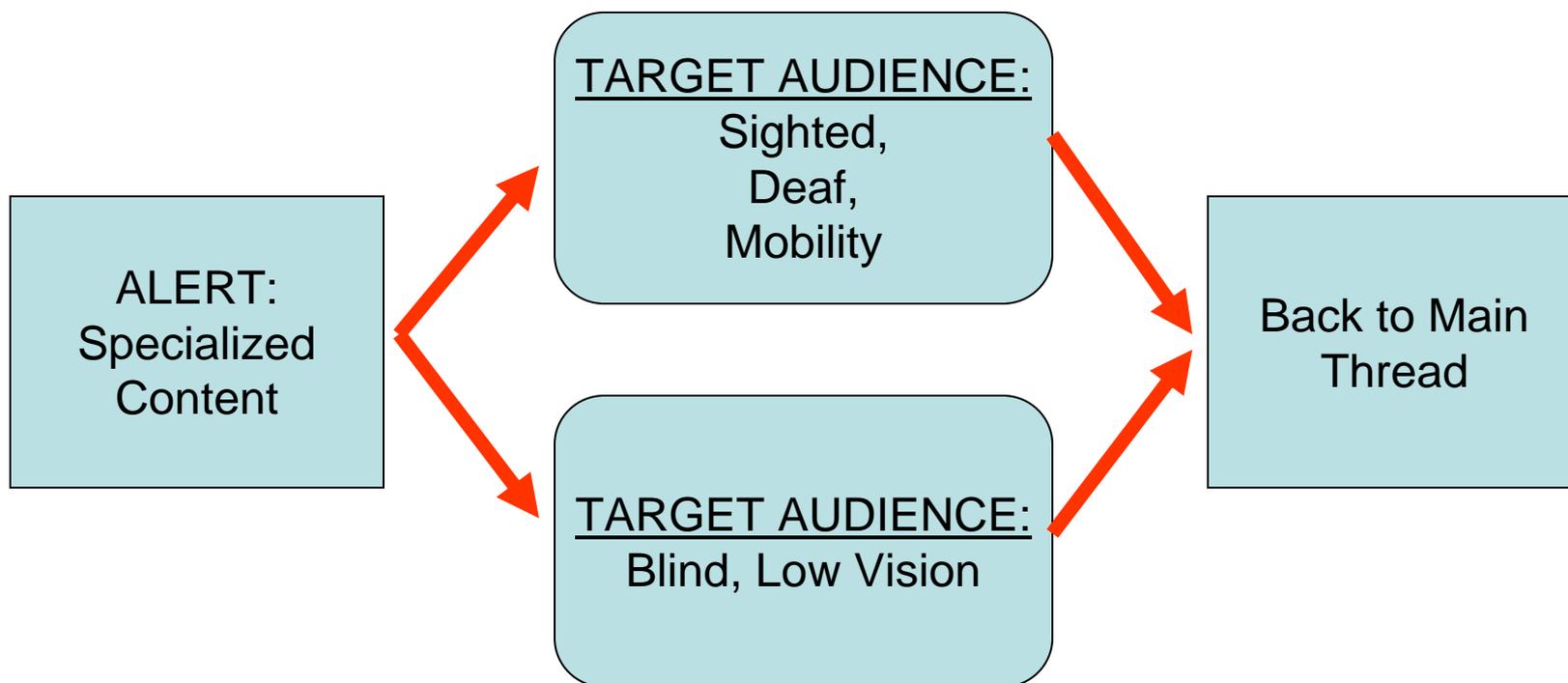
Within the accessible template, how will content be presented that best facilitates behavioral change in all learners.

- Target Training Content
- Usage Instructions for each Audience
- Alert to Change in Instructional Design



Provide Materials Best Suited for Learner

*ID Trap: Create training that caters to the least common denominator.



*ID = Instructional Design



- Expertise
- Time (Function of Budget)
- Access to Base Code (Off The Shelf)
- **Create Materials that Best Suit Learner**



Accessibility Warning Signs!

- If the content is not 100% equivalent.
 - Text to Text Equivalency
 - Interaction, Color or Non-verbal Cues Conveys Content
- If there is a substantial possibility that different versions can become out of sync.
- If there are not clear paths to equivalent versions.
- No attempt has been made to make as few training objects as possible.

Targeted materials is NOT an excuse to bypass Universal Design!



Provide the learner with explicit instructions on course layout, functionality and any advanced techniques.

Introduction Page 2 of 2

Toolbar Buttons

The toolbar used to navigate this course can be accessed at the bottom of the screen. Here is a brief explanation of each button in the toolbar.

Note: In this course you will be presented with both audio and narrative text. If you elect to turn off the audio portion of the content, please turn on the closed captioning option.

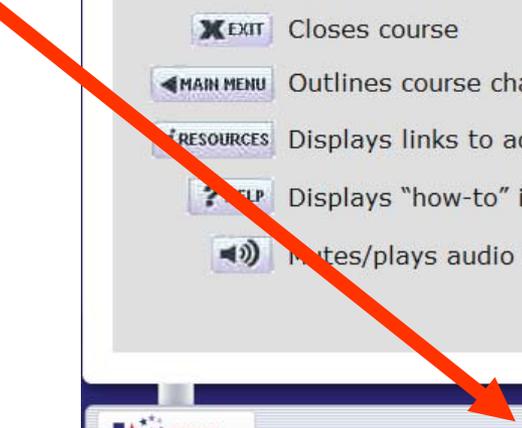
Select the Accessible Version Available icon below for more information on how to view this course in accessibility mode.

EXIT	Closes course	 	Starts/pauses audio narration
MAIN MENU	Outlines course chapters	CC	Displays/hides closed captions
RESOURCES	Displays links to additional content-related material	↻	Refreshes page
HELP	Displays "how-to" information for course	◀ BACK	Moves course back one screen
🔊	Mutes/plays audio narration	NEXT ▶	Moves course forward one screen

Functionality
Alert



Accessibility
Feature
Alert





Provide instructions

Accessible Pages Page 1 of 3

Accessibility Information

Accessibility
While DSHS strives to make all training materials perceivable by everyone, occasionally content or interactions may not be universally accessible. In these limited instances, alternative versions will be provided.

Vision
For blind and low vision users, we suggest allowing the audio narration to finish before navigating to the content. The narration is typically brief and is different from the displayed content. If you elect to mute the audio, you will need to enable closed captioning to make the transcript perceivable. Note, the first content item will be a heading level 1.

Mobility
The navigation links have been laid out to accommodate screen readers. As such, the Next and Back buttons are only available after tabbing through the content and control buttons.

Hearing
The closed caption button will activate a transcript of the audio narrations. If an interaction contains both sequenced events and audio narration, it may be necessary to check an additional closed captioning icon. In these instances, a message with further instructions will appear.

[RETURN TO LESSON](#)

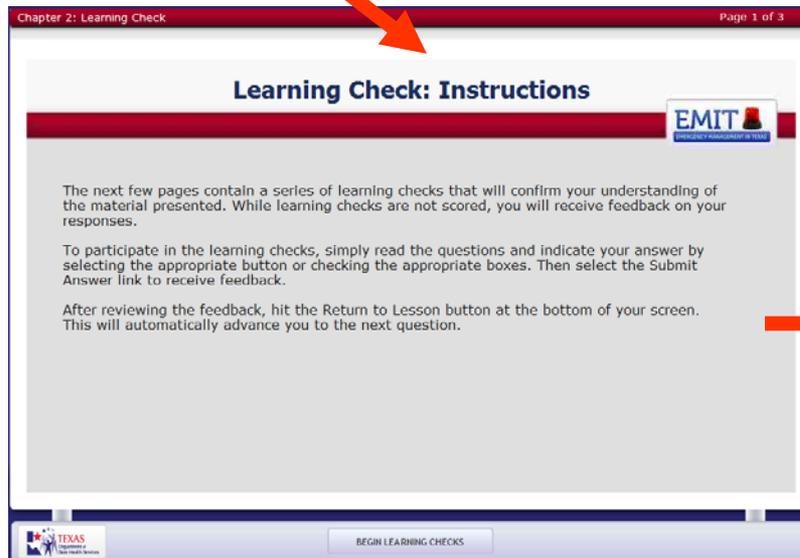
Explicit
Use Instructions
By Accommodation



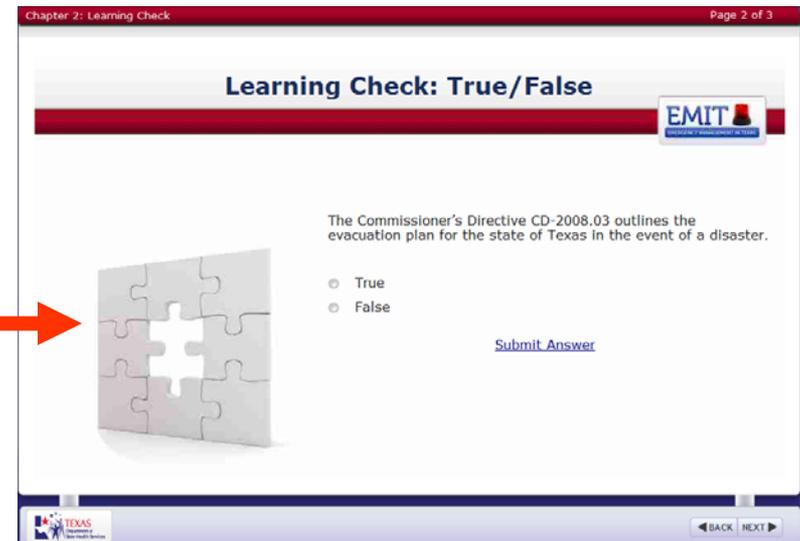
Alert Learner Before Changing Technique, Strategy or Physical Layout



Main Template



Technique Change Warning



New Layout



Courses should clearly tell the user when there is a logistical or strategic change.

- Clear Begin Chapter and End Chapter
 - Simple Page
 - Progression Indicator
- Course Content Ends (Next Steps)



- Reach more learners.
 - Unanticipated Secondary Audiences
 - Greater Portability
- Creates Higher Levels of Learning
 - Challenges the instructional designer to focus on delivery.
 - Executes a core principle of instructional design:

Materials that Create a Change in the Target Audience

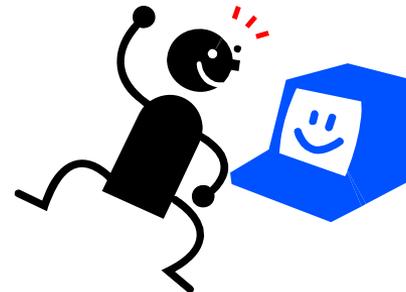
- It's not just about the blind.
 - Low vision on the rise; aging workforce.

Contrast is a great introduction to accessibility!!

- Simple tactics for increasing accessibility
 - Materials Best Suited to Audience
 - Give Meaningful Instructions by Audience
 - Alert Before Changing Strategies
 - Clearly Note Material Sections

Focus is on better training!

AWESOME!



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